

The
Ornithological
Council



PROVIDING
SCIENTIFIC
INFORMATION
ABOUT BIRDS

American Ornithologists' Union
Association of Field Ornithologists
CIPAMEX (Sociedad para el Estudio y
Conservación de las Aves en México)
Cooper Ornithological Society
Neotropical Ornithological Society
Pacific Seabird Group
Raptor Research Foundation
Society for the Conservation and
Study of Caribbean Birds
Society of Canadian Ornithologists/
Société de Ornithologistes du Canada
The Waterbird Society
Wilson Ornithological Society

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12 January 2012

Ted Wackler
Deputy Chief of Staff
Office of Science and Technology Policy
Attn: Open Government
725 17th Street, NW.
Washington, DC 20502

Submitted via e-mail to publicaccess@ostp.gov

Dear Mr. Wackler,

The Ornithological Council, a consortium of twelve scientific ornithological societies in the Western Hemisphere, submits these comments in response to the request by the Office of Science and Technology Policy (OSTP) for input on the Administration's interest in enhancing public access to scholarly publications resulting from federally funded research. Seven of our member societies — all not-for-profit — are based in the United States and publish peer-reviewed journals. One of those journals is fully open access; the others are not. The society publishers have voluntarily made the full run of those six journals and other publications (such as monograph series) available online at no cost to the public but due to lack of funding, some were unable to post volumes post-2000, despite their intent to continue making full content freely available subject to a four-year rolling window.

Much of the literature in those journals reports research funded in whole or in part with federal funding.

We share the Administration's view that increased access to scientific information benefits society. Scientists want to increase the dissemination and impact of the information they generate. As members of the *Washington DC Principles for Free Access to Science* (DC Principles), we support broad access to the scientific and medical literature. However, we are concerned about the impact of free access on scientific societies, and in particular, the idea that one model is appropriate to all scientific publishers, regardless of size, revenue, or current publishing model.

We are grateful to OSTP and the House Committee on Science and Technology for convening the Scholarly Publishing Roundtable. Notwithstanding the diligent efforts of the DC Principles, we have worried that the voices of small, nonprofit scientific societies have been drowned out in what has been an acrimonious debate that seemed destined to produce a single-model result that would be very

harmful to many scientific organizations. The Scholarly Publishing Roundtable report acknowledges the differences among scientific societies, but we would like to explain exactly what is at stake. The unintended consequences of an otherwise laudable activity — increasing the dissemination of science — could include the demise of many scientific societies. As these scientific societies serve society in many other ways — such as nurturing the development of new scientists and offering impartial expertise to guide government policy — it is critical that enhanced access to scholarly publications not be achieved by sacrificing these other important benefits to society. We suggest options to prevent those negative outcomes.

In the public notice, OSTP asked:

(1) Are there steps that agencies could take to grow existing and new markets related to the access and analysis of peer-reviewed publications that result from federally funded scientific research? How can policies for archiving publications and making them publically accessible be used to grow the economy and improve the productivity of the scientific enterprise? What are the relative costs and benefits of such policies? What type of access to these publications is required to maximize U.S. economic growth and improve the productivity of the American scientific enterprise?

We would like to begin by reminding OSTP of the costs of mandated, one-size-fits-all open access publishing. The very small not-for-profit societies such as those we represent rely heavily on the revenue generated by the publication of journals. That revenue derives from membership dues and library subscriptions. We have already seen declining membership resulting from the fact that university students and faculty members have virtual open access because they can obtain online, full-content papers from hundreds of journals through their university libraries. The convenience of having one's own copy so as to avoid a trip to the library once had value; without that value, some forego membership. Library budgets at most universities and colleges — particularly the state-funded universities — have declined significantly over the past three years and that has caused a reduction in subscription revenue.

We have warned over the years that mandated open access would lead to the extinction of many small not-for-profit societies, and that the loss of a society means the loss of a journal and perhaps other publications, such as monograph series. We are sad to report that what we predicted is beginning to occur, even without government-mandated open access to most of the papers published in their journals. Two of our societies are already contemplating a merger in part because the decrease in revenue of one of those societies has jeopardized its continued existence. Mandated open access could be the final blow to many small nonprofit scientific societies and their journals.

Fewer journals means fewer papers published. That is the cost of a mandated one-size-fits-all open access policy. There will be less scientific information published. Some might be self-published, but self-publication is no substitute for peer-reviewed publications that have passed the scrutiny of expert review and editorial review. While peer-review is not perfect, its failures are few and the vast majority of published papers are improved by this valuable process. Publication in established journals also increases accessibility because these papers are simply easier to find and are more likely to persist than those self-published on websites that may or may not be maintained over long periods of time.

It has been suggested by the proponents of open access that scientific societies undertake other activities and services to members that will attract membership and other sources of revenue. However, small not-for-profit societies typically do not have sufficient revenue to hire staff and undertake alternate activities that might generate revenue to replace the loss of publication revenue.

For these reasons, we reiterate what we said to NIH in 2004 and to OSTP in 2010 in calling upon the Administration to allow researchers and scientific societies the freedom and flexibility to increase access to scientific literature in the manner that best suits the circumstances of each society. We remind OSTP that a similar recommendation was made by Scholarly Publishing Roundtable, an ad hoc working group convened by OSTP and the House Committee on Science and Technology (January 2010). That working group recognized that a twelve-month embargo might not be adequate for some scientific disciplines. Our member societies publish quarterly journals. Protecting the revenue associated with access to what is considered current or recent content might require delaying public access for several years. The cited half-life of the journals published by our member societies ranges from 4.6 to 10 years. Nonetheless, all but one society participates in a fee-free archive with the intent to maintain a four-year moving wall. We note that other scientific societies have reduced the length of embargo periods over time. That may prove feasible for our member societies, too. Several publish through for-profit or nonprofit publishing houses or distributors and so can obtain statistical information on the demand for papers as a function of publication date. If they determine that revenue loss associated with access to papers not yet available in their own fee-free archives would be minimal, they may choose to decrease the duration of the embargo. Therefore, we suggest that the policy exempt papers published in the journals of small not-for-profit societies. The threshold for mandatory deposit into a public access repository could take into account the annual revenue of the society or the extent to which revenue associated with the publication comprises that revenue. Alternatively, allow a much longer embargo period for those papers, so those journals will still be able to derive some revenue for a period of years.

We also wish to remind OSTP of the cost associated with publication. The journals published by our member societies charge very low publication fees; none are higher than \$100 per page and all will waive some or all of the publication cost if the author is unable to pay for publication. Unlike other societies that are able to maintain relatively low page charges because membership fees are sufficient to subsidize the cost of publication, our member societies charge, at most, \$90 per year. Others charge as little as \$25 per year. All offer substantially reduced rates to students and young professionals. Increased page charges would erode research grants and increased membership dues would likely result in fewer members, and, in turn, reduced membership revenue. As membership revenue is a substantial part of overall revenue, this decrease would further jeopardize the existence of the society.

One key premise of public access has always been that public funds are used to fund the research and that therefore, the public should have access to the product. The public, however, does not seem to realize that there is always a cost associated with the transmission of information, whether on paper or on websites. There are costs associated with reviewing, editing, formatting, and publishing that the research funding does not cover. The other key premise of public access is that the information is valuable to society. If indeed this is the case – and we agree that it is – then the public should not object to the use of additional federal funds to develop the mechanisms needed to make this information very easy to access. In essence, the costs of access are shifting from the users who are saving the time and cost to go to a library or write to a publisher or author to obtain a copy of a paper,

to the producer. It follows that the users should then be understanding of the fact that additional federal funds are needed to provide what they are asking for. The oft-used analogy of the federal superhighway system is apt. Tax dollars pay for superhighways that make it easier and faster to travel by car, but we don't have free access to these highways. Tolls are charged to generate funds for maintenance. We make this point because the current political climate is such that the use of federal funding to support public access seems unlikely. If funding is not available, then a mandate seems inappropriate.

We have few recommendations to OSTP or the government to “*grow existing and new markets related to the access and analysis of peer-reviewed publications that result from federally funded scientific research?*” except perhaps to underwrite the creation and maintenance of the online public access websites so that societies such as ours can continue to make content freely available. As noted above, some of our member societies that would like to make more volumes available online, free-of-charge, have been unable to do so for lack of funding. We also suggest the creation of an online directory of public access websites and a mechanism to maintain orphaned open access websites. Finally, we suggest that the creation of an open-access citation system is essential to realizing the full value of open access scientific literature. Readers of a paper can of course determine which papers were cited by that particular paper, but the ability to find subsequent papers citing that particular paper is still limited to those able to afford access to an online citation system such as the Thomson-Reuters Science Citation Index. And more than a mere citation system, a set of discipline-specific annotated bibliographic databases would be invaluable to anyone delving into the enormous body of literature.

(2) What specific steps can be taken to protect the intellectual property interests of publishers, scientists, Federal agencies, and other stakeholders involved with the publication and dissemination of peer-reviewed scholarly publications resulting from federally funded scientific research? Conversely, are there policies that should not be adopted with respect to public access to peer-reviewed scholarly publications so as not to undermine any intellectual property rights of publishers, scientists, Federal agencies, and other stakeholders?

Any public access policy must include a provision that the original copyright holder retains all intellectual property rights conveyed by law. To the extent that a publications database is maintained by a federal agency, the agency should require that those accessing its holdings read and acknowledge the intellectual property rights of the holder. These acknowledgments should be maintained by the agency providing public access and made available to the copyright holder upon request. Without access to this information, the copyright holder has no means of enforcing the copyright, because there will be no means to track the use or misuse of the protected material. The online citations index, suggested above, would not suffice unless attribution is given – and in the case of misuse, that seems unlikely. Plagiarists rarely identify the source from which the material was taken.

(3) What are the pros and cons of centralized and decentralized approaches to managing public access to peer-reviewed scholarly publications that result from federally funded research in terms of interoperability, search, development of analytic tools, and other scientific and commercial opportunities? Are there reasons why a Federal agency (or agencies) should maintain custody of all published content, and are there ways that the government can ensure long-term stewardship if content is distributed across multiple private sources?

Centralized websites may be of value to societies that do not have sufficient funding to create and maintain their own public access websites, and are essential for housing orphaned websites, but no publisher or author should be forced to deposit a paper in a centralized system. Had Congress wanted to mandate a central repository, it could have done so when reauthorizing the America COMPETES Act. Instead, the legislation directed the working group to look for standards to maximize interoperability and to take into account existing standards. We also note that the assumption that a central repository created and maintained by an agency will be perpetual is a faulty one. At this moment, the U.S. Geological Survey is terminating the National Biological Information Infrastructure. Some of the databases will be incorporated into other programs (though not necessarily made available to the public) and some will be lost. A repository maintained by a federal agency may be more resistant to collapse than a privately maintained repository, but it is not entirely immune.

That being said, there should be a registration system whereby every repository that holds federally funded papers is reachable through a central directory and a provision that if a repository becomes orphaned, the central agency repository may take it over. Even then, the society should be permitted to first try to find another organization to maintain its holdings.

In our field, the development of metadata standards for data repositories is quite mature. From the development of the Darwin Core, first issued in 1998, to the 2009 release of the metadata standard, this body of standards now supports numerous extensions for use across organismal biology. It is recognized internationally and in wide use. Requiring this large body of literature to be deposited into a centralized database would impose an undue burden if that database uses different standards. It would also make it more difficult to retrieve data associated with the literature and vice versa.

(4) Are there models or new ideas for public-private partnerships that take advantage of existing publisher archives and encourage innovation in accessibility and interoperability, while ensuring long-term stewardship of the results of federally funded research?

We note that the kind of research generated by the scientists who are members of our societies is most likely of interest to agencies that are already struggling with insufficient funding for core operations and are unlikely to be able to engage in partnerships for the creation and maintenance of literature repositories. A public-private partnership assumes that there are users who are willing and able to contribute funding to the endeavor. There are some industries whose interests would be affected by the research generated by our members. However, it is often the case that those interests would be affected in an adverse manner. It is unlikely that they would be interested in making scholarly research more accessible. Indeed, the subject has already been broached with at least one industry and to this date, the industry has declined to even post these publications on its website, much less contribute to the development of a formal repository.

(5) What steps can be taken by Federal agencies, publishers, and/or scholarly and professional societies to encourage interoperable search, discovery, and analysis capacity across disciplines and archives? What are the minimum core metadata for scholarly publications that must be made available to the public to allow such capabilities? How should Federal agencies make certain that such minimum core metadata associated with peer-reviewed publications resulting from federally funded scientific research are publicly available to ensure that these publications can be easily found and linked to Federal science funding?

Metadata standards for publications should be consistent with the metadata standards currently in use for the data generated in a given discipline. Interoperability should include the ability to move between the publication and the underlying data as well as between publication repositories. Each repository that is registered with a central registry should indicate which metadata standard it uses. The central registry can maintain documentation pertinent to that metadata standard.

In addition to the metadata assigned to a given paper, each repository should have a set of metadata that can help users to find repositories likely to hold publications of interest.

(6) How can Federal agencies that fund science maximize the benefit of public access policies to U.S. taxpayers, and their investment in the peer-reviewed literature, while minimizing burden and costs for stakeholders, including awardee institutions, scientists, publishers, Federal agencies, and libraries?

Two kinds of burdens will be imposed on researchers and scientific societies. First, researchers will be required to learn and apply the metadata terms in order to deposit their publications into the repositories, and, in some cases to find an appropriate repository. This is already a barrier to the sharing and archiving of data and will likely be as much of a burden for the deposit of a published paper. Further, the assignment of metadata must be done correctly in order to make possible the retrieval of all papers on the subject of interest. Those who dismiss the burden of assigning metadata probably do not realize that it is not just a matter of clicking on a few drop-down lists. Entering metadata in such a way that it actually enhances the ability of others to find the information and evaluate its suitability for their purpose requires careful and complete entry of information in dozens of fields including geographic and taxonomic descriptors, date and time descriptors, and many others. The less information entered, the less useful the outcome. Users will find far too many datasets meeting if those datasets are described in a more general way.

It may be necessary to create and fund – perhaps within the grant-making agencies – a training and assistance program to aid researchers. These groups might also undertake to assign metadata to literature published prior to the imposition of any public access mandate so as to make it possible for those who wish to do so – i.e., on a purely voluntary basis – to deposit these papers into the repositories. The more publications held and classified with standardized descriptors, the more useful the repository will be.

It would probably be best if the researcher could simply associate the publication, using the digital object identifier, with the metadata associated with the underlying dataset. That way, the metadata would be created only one time for both the dataset and all publications associated with it. Even if the underlying dataset is not yet publicly accessible, the metadata will be accessible and the associated publications can be located.

The financial consequences could be ameliorated by increasing grant size, reimbursing universities that pay publication costs for their faculty members and students, and subsidizing the cost of creating and maintaining repositories.

Government-mandated public access has been based on the premise that the research was funded with taxpayer money. The literature has always been available to the public. This discussion is really about

convenience – making the literature available without a trip to a library or requesting a copy from the author or the publisher. If the public wants this government-mandated convenience, it should also be willing to pay for that convenience.

(7) Besides scholarly journal articles, should other types of peer-reviewed publications resulting from federally funded research, such as book chapters and conference proceedings, be covered by these public access policies?

In our field, conference proceedings (where they exist) rarely consist of the full text of a talk along with the associated slides or other media. Proceedings are more commonly a listing of talks and perhaps abstracts. Full-text or not, they are rarely peer-reviewed. It is probably a waste of resources to require that these materials be made open access or that any society or agency maintain a public access repository for these materials.

Book chapters are commonly published as papers in a volume dedicated to a specific topic. The legislation pertains to “scholarly publications” and does not distinguish between journals and books. For the purpose of allowing the society that publishes the book to receive the revenue associated with that volume, there is no difference between a journal and a book. The small, not-for-profit societies depend on this revenue and if all the papers can be accessed by the public at no cost, the value of that volume drops nearly to zero. If societies can not derive revenue from these publications – even to the extent of recouping their costs – they will cease to publish. The end result is less science that could be made publicly accessible at some point.

(8) What is the appropriate embargo period after publication before the public is granted free access to the full content of peer-reviewed scholarly publications resulting from federally funded research? Please describe the empirical basis for the recommended embargo period. Analyses that weigh public and private benefits and account for external market factors, such as competition, price changes, library budgets, and other factors, will be particularly useful. Are there evidence-based arguments that can be made that the delay period should be different for specific disciplines or types of publications?

As previously stated, the Scholarly Publishing Roundtable recognized that a twelve-month embargo might not be adequate for some scientific disciplines. Our member societies publish quarterly journals. Protecting the revenue associated with access to what is considered current or recent content might require delaying public access for several years. The cited half-life of the journals published by our member societies ranges from 4.6 to 10 years. Nonetheless, all but one society participates in a fee-free archive with the intent to maintain a four-year moving wall, finances permitting. They may eventually determine that a shorter embargo period will not reduce the level of paid access, but the point is that they should be able to determine the appropriate embargo period. Establishing an upper limit or a sliding scale that takes into account the extent to which the society relies on journal revenue is reasonable and fair, if these metrics are established in consultation with scientific societies.

Currently, there are numerous journals in organismal biology, wildlife biology, and ecology that offer no public access, even for material that is decades old. This may be as much a function of the cost to convert older formats and maintain a website as it is about the loss of revenue. Societies that do not have the financial resources to provide public access to older volumes should be given assistance to make access available.

Again, we thank OSTP for considering the concerns and views of the scientific societies we represent and we hope that our comments prove helpful.

Sincerely,

A handwritten signature in black ink that reads "Ellen Paul". The signature is written in a cursive style with a large, prominent initial "E".

Ellen Paul
Executive Director