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Office of Science and Technology Policy  
Attn: Open Government  
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*Submitted via e-mail*

Dear Dr. DiEuliis,

The Ornithological Council, a consortium of eleven 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. 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.

*Scientific societies as disseminators of peer reviewed literature*

Among their many important roles, scientific societies provide the most common means of disseminating peer reviewed papers. Commercial publishers offer journals that are not associated

with scientific societies and in recent years, some alternative publishing options such as PloS have appeared. However, society-based journals still offer the greater part of publishing opportunities with the assurance of peer review. Currently, almost all society-based journals provide fee-free archives but limit access to more recent content to subscribers. Journal revenue makes these archives possible. The duration of limited access ranges from a few months to several years. Should a society lack funding to create or maintain a fee-free archive, access to the papers published in that society's journals would be lost.

In some cases, subscriptions fees may be a significant barrier to access to recent content, but that is not always the case. The annual membership fee for one of the member societies of the Ornithological Council is \$25, which is the typical cost of a pay-per-view for a single paper for most journals. Full membership in all seven societies based in the United States would cost \$368 for print journals and \$313 for online journals.

Many society-based journals are now published and distributed by commercial publishers, and that makes it possible to offer pay-per-view options for individual articles.

Many authors now make publications available on their own websites, and search engines make these publications readily accessible. However, websites are not persistent and even those that persist go untended for long periods of time.

#### *Importance of journal revenue*

For most not-for-profit scientific societies, journal revenue is a necessity. To a greater or lesser extent, it sustains the society. A enhanced access policy could undermine the journal revenue upon which many scientific societies depend upon to nurture the development of scientists and other activities that benefit the public such as independent, credible scientific review and ultimately, for their very survival. If not designed carefully to avoid impacting journal-derived revenue, a public access policy could be detrimental to scientific societies and society at large.

The societies that comprise the Ornithological Council rely almost entirely on revenue generated by their journals. That revenue includes both individual memberships and library subscriptions. Our member societies are among the many that have experienced a significant drop in individual memberships as a result of the development of online library access at most universities and research institutions. Some members viewed the convenience of a personal copy delivered directly to the home or office as the primary benefit of membership. When electronic journals became widely available to students, faculty, and others associated with universities and other research institutions, some, not recognizing the other benefits of society membership, let individual memberships lapse. Others never join. The loss of revenue from individual memberships has been cushioned to some extent by an increase in library subscriptions. Recent budget problems, particularly at public universities, has now jeopardized that revenue source, too, as libraries have been forced to eliminate many journal subscriptions. Mandated public access would further undermine critical revenue, particularly were the embargo period is too short.

Continued revenue declines threaten the continued existence of scientific societies. The loss of a scientific society, in turn, represents the loss of that society's journal. The overall effect would be a reduction in published scientific information in peer-reviewed journals. Other journals might absorb some of this output, but much would surely be published without the benefit of peer review. The other important functions of that society, such as furthering the development of scientific careers and providing impartial peer review services to government agencies, would be lost.

### *Embargo duration*

We join with our colleagues in the DC Principles 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. 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. Most have already established fee-free public access archives and intend to continue to do so. Note that the considerable cost of providing fee-free archives is sustained by the societies and therefore subsidized by revenue derived from the journal. 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. Meanwhile, though, we suggest that the embargo period associated with public archiving vary according to the journal in which the paper is published. Establishing an upper limit or a sliding scale that takes into account the extent to which the society relies on journal revenue may not be unreasonable, if these metrics are established in consultation with scientific societies.

### *Potential impact on research and number of publications*

The enhanced public access model used by the NIH, which other agencies are likely to emulate, may erode research funding in three ways. First, journals may need to increase page charges to offset the loss in subscription revenue. Funding page charges from the grant necessitates increasing grant size. Larger grants result in a reduction of the number of grants available. Second, it is impossible to predict page charges accurately as it is not possible to know in advance how many publications might result from the funded work or which journals will accept the papers for publication. The amount estimated in the grant proposal for page charges may prove to be insufficient. Universities may well increase overhead rates to accommodate the need to supplement grant funds to cover page charges. Increased overhead also results the amount of funding that goes to actual research.

These impacts must be offset by a commitment on the part of the Administration and the Congress that additional funding will be made available. Otherwise, the unintended consequence of an enhanced access policy may be a reduction in the number of peer-reviewed publications.

Finally, the cost to create and maintain public archives comes from the same appropriations pools that fund the grantmaking agencies and intramural research agencies. A central public archive is not necessary given the availability of digital object identifiers (DOI) that make it easy to find an item wherever it is published. The journal of record should be the primary repository, supplemented by the fee-free archive of that journal and by the authors' websites so as to assure copyright protection. More to the point, though, is the avoidance of diversion of research dollars for the creation and maintenance of a central public archive. If a paper reports research funded by more than one agency, and each agency maintains its own archive, the paper would have to be submitted to multiple archives. To the extent such archives are warranted, it should contain only the citation, abstract, and the DOI.

In addition, the costs associated with enhanced public access may impact journals directly. Page charges for the journals published by our members societies are extremely low, ranging from \$75-\$100 per page; charges are routinely waived if the author is unable to pay. These charges represent a fraction of the actual cost of publication. For instance, PloS Biology charges \$2,900 per paper, notwithstanding revenue from many sponsors, advertisers, and foundations. If societies are forced to increase page charges to offset the loss in subscription revenue, there may be more authors unable to pay the full cost of publication and societies will be forced to absorb more of the cost, if they are able to do so. Otherwise, they may be forced to turn away worthy and important papers. A paper that is not published is not accessible to anyone.

We are also concerned about the possibility that publishing costs could result in the erosion of the peer review process. If opportunities to publish in peer-reviewed journals decline, or the costs become prohibitive, more scientists will turn to self-publication, which in turn will erode the quality assurance afforded by the journal peer-review system. That, in turn, may lead to a lack of credibility of scientific literature as a whole.

### *Ensuring compliance*

Grant conditions seem adequate to ensure compliance by requiring that each published paper be assigned a digital object identifier (DOI). When applying for further grants, the applicant can certify that all papers published with prior federal grants or contracts have been assigned DOIs and that the full citation, abstract, and DOI for each paper has been recorded in a central archive. With the DOI, the paper can be accessed easily at any publication site after the embargo period has ended.

### *Enhancing utility*

If the Administration selects a model involving a central archive, then indexing would be an option that would greatly enhance access and utility for all users, including those who have other avenues of access. Each paper would be accompanied by a list of later papers that cite that paper,

much as the paper-based science citators (now Web of Science) allow researchers to find more recent papers. In addition, because of the development of DOIs, a link can be provided to each of the papers cited in a deposited paper, if those earlier papers are available online with a digital object identifier.

### *Conclusion*

Our mission, in part, calls for our organization, working with our member societies, to “ensure that the best ornithological science is incorporated into legislative, regulatory, and management decisions that affect birds.” Our organization, its member societies, and the ornithologists who publish in the peer-reviewed journals of our member societies devote extensive time and effort to working with government agencies, conservation organizations, and the private sector to be sure that measures taken to protect wild birds are science-based. We recognize that enhanced public access to the scientific literature is consistent with our purpose, but it is just the starting point. Much more is needed to assure that the published findings pertaining to a particular species, time, place, and set of conditions are applied appropriately to other conditions. We encourage OSTP to develop guidelines for enhanced public access that will help preserve the integrity of the scientific societies that serve society.

We thank OSTP for the opportunity to comment on this subject and hope that our comments prove useful in devising policies that achieve enhanced public access without weakening the scientific societies that publish the peer-reviewed journals in which scientific information is made available.

Sincerely,

Ellen Paul  
Executive Director