

The Last Antarctic Journal

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This final issue of the *Antarctic Journal of the United States* ends a journal series that began in 1959, just after the International Geophysical Year ended and the United States Antarctic Program began.

NSF started the *Journal* in 1966 to replace the Navy's *Bulletin of the U.S. Antarctic Projects Officer* (support) and the Foundation's *Antarctic Report* (science), integrating the content of the two and "providing further evidence of the singleness of purpose of our operations and program efforts."¹

After 38 years, the *Journal* achieved what only the most cavalier editor might have wished. Being just one component of the Foundation's evolving support of antarctic research and information activities, it worked itself out of a job.

Despite Antarctica's prominence in the IGY and the 1959 signing of the Antarctic Treaty, the region in the early 1960s did not yet have widespread scientific attention. To help correct this situation, the Bureau of the Budget directed the Foundation to "serve as the clearinghouse and source of information regarding the existence and location of antarctic records, files, documents, and maps maintained within the various executive agencies and nongovernmental organizations."² NSF started the *Antarctic Journal* and these other major projects:

- The Library of Congress began compiling the *Antarctic Bibliography*, which continues to this day under an NSF cooperative agreement with the American Geological Institute.³ The project has resulted in the world's most complete science bibliography of the region; it collaborates with the world's most complete polar library, that of the Scott Polar Research Institute, University of Cambridge.
- From 1964 to 1998, NSF funded the American Geophysical Union's *Antarctic Research Series*—a book series of original, peer-reviewed research monographs. The *Series* has continued without NSF funding and now comprises 79 published volumes.⁴
- Between 1966 and 1975 the American Geographical Society published the NSF-funded *Antarctic Map Folio Series*, a boxed set of 19 oversize folios that map and describe scientific understanding as known then.⁵
- In an interagency agreement with NSF, the U.S. Geological Survey began and still maintains the U.S. Antarctic Resource Center—the Nation's most comprehensive collection of antarctic maps, charts, satellite images, and photographs.⁶
- Facilities for the curation and dissemination of ice cores, ocean-bottom sedimentary cores and grab samples, continental cores, rock samples,

meteorite samples, and biological specimens were established and continue to be funded by NSF.⁷

- In 1996 NSF began funding the U.S. Antarctic Data Coordination Center at the University of Colorado, Boulder, a function that continues today in service to the research community.⁸

The *Antarctic Journal* had an impact. The Institute for Scientific Information in 1982 analyzed for NSF the citation characteristics of antarctic research literature published from 1961 to 1978. To the surprise of many, no other serial matched the *Antarctic Journal*'s number of papers (496 of them) that other research papers had cited at least once. The *Journal of Geophysical Research*, *Nature*, *Science*, and *Earth and Planetary Science Letters* placed second, third, fourth, and fifth—with 357, 234, 123, and 88 papers, respectively.⁹

The number of citations *per paper* told a different story. The *Antarctic Journal* got an average 2.47 citations per paper (of those cited at least once); *JGR* got 20.86. NSF said at the time, “The *Antarctic Journal*'s low citation rate is consistent with the Foundation's policy to publish preliminary antarctic reports rather than final scientific papers.”

The *Antarctic Journal* was not peer reviewed. In the later years, more than once, peer reviewers commented that a research proposal to NSF listed an investigator's *Antarctic Journal* articles at the expense of papers in peer-reviewed journals.

The antarctic science portfolio in the last decade added substantial amounts of astronomy, astrophysics, and meteorite studies—disciplines that have little to do with understanding the Antarctic. The *Journal* became incomplete in recording research results of the U.S. Antarctic Program because investigators in those disciplines ignored it.

These factors and two other big ones brought the Office of Polar Programs to the decision to stop publishing the *Antarctic Journal*. The first factor was that, while in 1966 antarctic research had comparatively low visibility in the science community, the science lately has achieved much greater representation in the mainstream journals. Ice core researchers (all regions), to take an example, published an average of 14 papers per year from 1985 through 1990, but the number rose sharply to 84 in 1991 and 412 in 2003. These statistics minimized the need for a special vehicle to insure the reception of antarctic research results in the broader community.

The other factor of course was the World Wide Web and the research community's and NSF's shift to an online business and reporting environment. Here is a short list of what we have now that we did not have a decade ago:

- An online and searchable list of NSF antarctic awards.¹⁰
- The online *Antarctic Bibliography* for research publications.
- The online U.S. Antarctic Data Coordination Center.
- The U.S. Antarctic Resource Center, increasingly online.
- The *Antarctic Sun*, published weekly in the austral summer by the support contractor.¹¹
- Individual investigators' web sites. Of the 156 field projects in the 2003-2004

U.S. Antarctic Program, 89 (57%) listed web sites describing their projects. The percentage seems to rise each year.¹²

Expense was another factor to consider. In its later years, the cost to mail the *Journal* to subscribers almost equaled the cost of printing it. Both costs disappear in the online operating environment that NSF as a whole is promoting.

The *Antarctic Journal* did have another major category of content besides the short reports by investigators that are the focus of the above discussion: reports on field activities and related events that were written by staff of NSF or the support contractor. These reports gave something of a running U.S. Antarctic Program history. Countless times we have looked to past issues of the *Antarctic Journal* for what happened in the U.S. Antarctic Program. NSF continues to compile the historical record, but in a less narrative way as annual reports required by the Antarctic Treaty.¹³

While the *Journal* is gone except as a valuable archive (we hope to put the entire 38 years online) comments from the community would be most welcome as we continue to learn how to use the new communications tools that are available to us. Replacements for these old *Antarctic Journal* staff articles, if desired, could be in the form of annual or other reports or a "what's new" section on the web.

¹ T.O. Jones and F.E. Bakutis, 1966, "Introduction to the Antarctic Journal of the United States," *Antarctic Journal of the United States*, 1, 1(1). The cited earlier journals were published from 1959 through 1965.

² Bureau of the Budget Circular A-51, August 1960. The circular was revised in 1971 as Office of Management and Budget Circular A-51 with the quoted passage intact. The circular was retired, presumably by Presidential Memorandum 6646, 1982, which does not contain this passage.

³ www.coldregions.org. The *Antarctic Bibliography* covers the literature since 1951. The U.S. Navy brought the pre-1951 literature under bibliographic control in 1951; Scott Polar Research Institute includes the cited items in its online bibliography at <http://www.spri.cam.ac.uk/library/>.

⁴ www.agu.org. The last NSF grant was <https://www.fastlane.nsf.gov/servlet/showaward?award=9414962>.

⁵ <https://www.fastlane.nsf.gov/servlet/showaward?award=6300003>. The award amount shown is not the total, as the initial award was made in 1963. The funding NSF office is listed incorrectly, possibly because of a coding error introduced when old records were digitized.

⁶ <http://usarc.usgs.gov/>

⁷ Ice cores: <http://nicl.usgs.gov/index.html>. Ocean bottom and continental cores: <http://www.arf.fsu.edu/>. Meteorites: <http://www-curator.jsc.nasa.gov/curator/antmet/antmet.htm>. Biological specimens: <http://www.nmnh.si.edu/iz/usap/>. Rock samples: <http://bprc.mps.ohio-state.edu/agd/>.

⁸ <http://nsidc.org/usadcc/>

⁹ Guy G. Guthridge, "Citation of research literature," *Antarctic Journal of the United States*, XVIII,2(12-13), 1982.

¹⁰ <https://www.fastlane.nsf.gov/a6/A6SrchAwdf.htm>. This is a fully searchable site for all NSF awards. In "Field of Application," selecting "Polar Programs-Related" limits the search.

¹¹ www.polar.org

¹² <http://www.nsf.gov/od/opp/antarct/treaty/opp04001/index.html> lists most projects.

¹³ <http://www.nsf.gov/od/opp/antarct/treaty/index.htm>