



LETTER FROM THE PRESIDENT

It is hard for me to believe that JSTOR celebrated its fifth anniversary during this past year. Like so many things in life, it seems like only yesterday that we started and yet it also feels like forever that we have been here! In some ways we have been surprised by the extraordinary and enthusiastic reception that JSTOR has received in the scholarly community – nearly 900 institutions around the world are library participants, while 120 publishers have signed on to contribute their content to the archive. We are extremely grateful for the support of so many of you and recognize the tremendous responsibility that places upon us.

Even more surprising than the institutional support for JSTOR has been use of the resource by scholars and students. JSTOR was founded on the notion that centralizing the archiving of older academic journals would reduce system-wide costs, but we never anticipated the scale and range of uses to which the archive would be put. In October 2000, we passed 4 million accesses in a single month, and we conservatively project that close to 3 million articles will be printed this year. The resource is being used for research, for teaching, and for other purposes that we never anticipated, two of which are highlighted in this newsletter. We are proud of the many novel uses of the database and the potential for serving an even wider community.

The more we achieve, the more we are expected to achieve. As we look ahead, we plan to work even harder in an effort to anticipate JSTOR's "unintended benefits" and to play a proactive role in making them reality. Perhaps we are pursuing an unattainable objective in trying to render the unintentional intentional, but it is that kind of effort that keeps an organization vibrant. Your feedback is critical in keeping us "alive" and so, as always, I urge you to share with us your comments and criticisms.

Kevin M. Guthrie

JSTOR RELEASES NEW ECOLOGY & BOTANY COLLECTION

Nearly 1,500 journal years of academic literature in Ecology and the Botanical Sciences is being added to the JSTOR digital archive this fall. These journals will be preserved and maintained in electronic format for the benefit of present and future scholars and students. The new collection will offer convenient access to 29 of the most important and valuable journals in these fields.

JSTOR created the collection in cooperation with the Ecological Society of America (ESA), a non-partisan, not-for-profit organization of scientists founded in 1915. The organization focuses on promoting ecological science in a variety of ways, including improving communication among ecologists, raising public awareness of the importance of the field and increasing the resources available for the conduct of ecological science.

"In addition to serving as an important archive, the Ecology & Botany Collection creates a new level of access to a significant collection of valuable scientific literature," says Kevin M. Guthrie, President of JSTOR. "The historical material contained in this collection will be valuable to scholars and professionals around the world. This is especially true in developing countries, where obtaining research in the field of ecology is taking on increasing importance but where access to these journals is limited."

The collection, totaling approximately one million pages, contains some of the most well-established journals published in the environmental sciences. Many publications extend back into the 19th century, such as *American Naturalist* and *International Journal of Plant Sciences*. Newer journals disseminating groundbreaking research, like *Conservation Biology* and *Journal of Tropical Ecology*, are also included.

According to Katherine McCarter, Executive Director of ESA, "The titles in the collection were chosen to represent the basic body of knowledge needed in the field. By providing con-

venient access to the very best journals available, the collection is an invaluable research tool for ecologists and other scientists.”

The ESA was one of the earliest participating publishers in JSTOR, and three ESA journals, *Ecology*, *Ecological Applications*, and *Ecological Monographs*, are also included in JSTOR’s original cluster of 117 journal titles, the Arts & Sciences I Collection.

“The ESA played an important role during the development of the collection, first, by convening a committee of experts to set priorities and select journals for inclusion and second, by building enthusiasm for the project in the community,” says Heidi McGregor, Director of Publisher Relations for JSTOR. “This was the first cooperative venture of its kind for JSTOR with a membership society and it has been extremely successful. It will serve as a model for the development of new collections in the future.”

JSTOR ECOLOGY & BOTANY COLLECTION

(first year of publication in parentheses)

American Journal Of Botany (1914)
American Midland Naturalist (1909)
American Naturalist (1867)
Annals Of The Missouri Botanical Garden (1914)
Annual Review Of Ecology And Systematics (1970)
Biotropica (1969)
Brittonia (1931)
Conservation Biology (1987)
Diversity And Distributions (1993)
Ecological Applications (1991)
Ecological Monographs (1931)
Ecology (1920)
Evolution (1975)
Functional Ecology (1987)
Global Ecology And Biogeography Letters (1991)
International Journal Of Plant Sciences (1875)
Journal Of Animal Ecology (1932)
Journal Of Applied Ecology (1964)
Journal Of Biogeography (1974)
Journal Of Ecology (1913)
Journal Of Tropical Ecology (1985)
Journal Of The Torrey Botanical Society (1870)
Limnology And Oceanography (1956)
Missouri Botanical Garden Annual Report (1890)
New Phytologist (1902)
Paleobiology (1975)
Quarterly Review Of Biology (1926)
Systematic Biology (1952)
Systematic Botany (1976)

MANCHESTER MYSTERY

It was a crime that would have confounded Hercule Poirot. On the night of August 17, thieves broke into the computer room at the University of Manchester in the United Kingdom and disappeared with hardware from a number of university computer systems – including the server used for JSTOR’s mirror site in the U.K. Without these components, JSTOR access was disrupted at 47 colleges and universities throughout the U.K. and seven institutions in Ireland.

The theft was similar to other computer facility break-ins throughout Europe, where an underground market for stolen hardware seems to have developed. The police were summoned to the scene as soon as the theft was discovered and as the JSTOR technology team awoke on Friday morning, they were alerted that the mirror site would be down. The team immediately took the necessary steps to re-route U.K. server traffic through the U.S. JSTOR’s U.S. servers were quickly reconfigured so that they could take on the load from the mirror site to serve U.K. users, while continuing to serve users in the U.S.

“It took us about three hours to resume U.K. server access to JSTOR,” explains Sherry Aschenbrenner, User Services Coordinator. “Because we were able to reroute traffic to the U.S., JSTOR became the first resource affected by the break-in to go back on line.”

The reconfiguration was a complex, multi-step process. It consisted of modifying configuration files to alert the U.S. Web servers that they needed to respond to www.jstor.ac.uk, as well as to www.jstor.org, and ensuring that Web pages specific to the U.K. site would continue to appear and would appear only to users of that site. In addition, the JSTOR technology team needed to make sure that the U.S. servers would successfully authorize users logging on to the U.K. JSTOR host. The reconfiguration process also allowed for services on both continents to receive regular updates of Web server pages and code.

Although JSTOR service was restored by Friday, additional reconfiguration was needed over the weekend so that students and faculty could regain off-campus access to JSTOR through an authentication system called ATHENS. By Monday, this final step was completed. “JSTOR’s support staff in the U.S. and at Manchester worked extremely hard and succeeded in restoring the service in a very short time, thanks to the foresight of having mirror sites that can take on extra load at a short notice,” says Sean Dunne, Head of Bibliographic Services for Manchester Information and Associated Services (MIMAS) at the University of Manchester.

This wasn’t the first time that JSTOR traffic had been rerouted from one server to another. Over New Year’s Eve, connections to JSTOR’s U.S. servers were shut down by their host universities as a Y2K precaution. The Manchester server remained in service, and U.S. users seamlessly gained access to the database through the U.K. mirror site.

“The fact that we had rerouted traffic over New Year’s is what made it possible for us to make changes in just three hours,” notes Amy Kirchhoff, JSTOR Software Developer. “If we have to do it again, it will be even easier for us.”

Because such a large number of components had been stolen from several machines in Manchester, it took some time before Sun Microsystems was able to replace all the missing parts. The U.K. server was fully restored by September 8; after extensive testing, service was switched back to the mirror site on October 4. During the entire time that the U.K. server was not in service, JSTOR users in the U.K. and Ireland had complete access to the database through the U.S. mirror site, without seeing any difference in service. In addition, users continued to use the U.K. URL and were not aware that traffic was actually being rerouted to machines serving www.jstor.org.

“One of JSTOR’s primary objectives is to serve as a trusted archive,” says Kevin M. Guthrie, President of JSTOR. “By establishing multiple sites where the database is housed and putting in place infrastructure to utilize these resources flexibly, we can continue to fulfill this mission even in the face of unexpected challenges.”

In Manchester, the mystery of the missing computer components remains unsolved.

JSTOR ESTABLISHES PILOT PROJECT FOR SECONDARY SCHOOLS

Over the last year we have received an increasing number of requests for access from secondary schools around the country. In response to this interest we have launched a pilot project to explore whether JSTOR will be valuable to this community and, if so, how best to make it available. For those of us who have been around JSTOR since the beginning this is very reminiscent of our earliest steps to test interest in the concept at colleges and universities.

From our initial conversations and meetings with high school administrators, librarians, and faculty, we are convinced that the pilot is important. There is some evidence that JSTOR can have an impact on issues such as:

Access to high quality scholarship – scholarly research journals are generally not available at high schools. Some might argue that that is because these journals have a scholarly focus that is not relevant to the work of high school students. JSTOR can help test whether this is true by making access to back issues of journals convenient and location-independent.

Offering reliable information – with students at all levels increasingly relying on the Web for information (sometimes at the exclusion of any other source), teachers are concerned about the quality and integrity of the information that students get from the Web. Might JSTOR be a useful, controlled and reliable information environment to which teachers can direct students?

Teaching students basic research techniques – JSTOR’s historical depth offers opportunities for librarians and faculty to teach students how to conduct research. For example, there are countless possibilities for assignments to trace the development of an idea over the course of time, or for studying how different academic disciplines approach a similar topic in different ways.

Promoting staff development – JSTOR can be an important research resource for faculty, as well as an integral resource in local curriculum development.

The pilot participants include seven public and seven private high schools from seven states around the country.

JSTOR SECONDARY SCHOOLS PILOT PROJECT PARTICIPANTS

Hunter College High School - New York, NY

Stuyvesant High School - New York, NY

Bronx High School of Science - Bronx, NY

The Dalton School - New York, NY

Ethical Cultural Fieldston Schools - New York, NY

Scarsdale High School - Scarsdale, NY

Lakeside School - Seattle, WA

Phillips Exeter Academy - Exeter, NH

Bronxville Public Schools - Bronxville, NY

University High School - San Francisco, CA

Mary Institute and St. Louis Country Day School - St. Louis, MO

Newton Public Schools - Newtonville, MA

Westminster Schools - Atlanta, GA

Great Neck Public Schools - Great Neck, NY

The pilot program is scheduled to run through the end of the 2001 calendar year. Schools are being asked to contribute staff time to ensure that faculty and students are aware of the availability of the resource and to provide feedback to JSTOR and to each other in exchange for access to the database during the pilot period. Our goal is for this pilot program to be a positive experience for each school, while at the same time providing JSTOR with important feedback on the utility of the resource at this academic level. We are grateful to the Sherman-Fairchild Foundation for providing support for this initiative.

CONTRIBUTING TO THE HISTORY OF WORDS AND IDEAS

Economists might want to cite Milton Friedman when it comes to free markets, but don’t quote him about free lunches. It turns out that the truism “There’s no such thing as a free lunch” attributed to him by *Bartlett’s Familiar Quotations* and other sources, was not originally conceived by Friedman.

The saying has been attributed to Friedman ever since he published a book by the same name in 1975. However, using JSTOR to help compile the forthcoming *Yale Dictionary of Quotations*, Yale University researcher Fred Shapiro has unearthed evidence that the quotation was first used at a much earlier date.

A 1952 article in the journal *Ethics* about nationalizing industries, attributes the saying to “Professor Alvin Hansen in his famous TINSTAAFL formula – ‘There’s no such thing as a

free lunch.” (Professor Hansen was a prominent economist and professor at Harvard University.)

Shapiro is a linguistic cyber-sleuth, historical lexicographer, lecturer in legal research at Yale University, and editor of the forthcoming *Yale Dictionary of Quotations*. He is using JSTOR to ensure the inclusion in the *Yale Dictionary of Quotations* of the most popular and eloquent quotations, especially more modern American sayings which are often missed by other dictionaries of quotations. Shapiro has also used JSTOR to find much earlier uses of important words and phrases than had previously been known, often significantly pushing back the record as documented by the Oxford English Dictionary (OED). He has already antedated more than 500 important terms.

Shapiro is a pioneer in using computer databases for this kind of research: in 1978, he became one of the first people to start using Lexis/Nexis (back when the database was just called Lexis) for linguistic research. Here are some examples of other discoveries that JSTOR has made possible:

Double-standard: (OED 1951, JSTOR 1912, in a book review of *A Short History of Women's Rights* in *The American Political Science Review*, Vol. VI, Issue 4): “Mr. Hecker urges that the double standard of morality for the sexes must gradually be abolished.”

Common market: (OED 1954, JSTOR 1893, “The Duties on Wool and Woollens” by F.W. Taussig, *Quarterly Journal of Economics*, Volume 8, Issue 1): “Probably the wool that might compete most directly with the bulk of the domestic product is that of the Argentine Republic...the duty prohibits its importa-

tion into the United States. So long has it been prohibited that the trade has lost that one infallible measure of comparison which is given by sale in a common market.”

Native American: (OED 1974, JSTOR 1931, in a book review of *Adair's History of the American Indians*, *Mississippi Valley Historical Review*, Volume 17, Issue 4): “Imbued with the old idea that the native Americans were the descendants of the Ten Lost Tribes of Israel, Adair...took up the study of Hebrew.”

Solar: (OED 1972, JSTOR 1914, in a book review of *Natural Sources of Energy*, by A.H. Gibson, *Journal of Political Economy*, Volume 22, Issue 7): “The author [believes] that science will furnish inventions that will economize the use of fossil fuels and make more and more available other source of energy – power from vegetable sources, from solar energy, from tides, from waterfall, and from wind.”

At JSTOR, we find all of this very fascinating, but Shapiro reminds us that it is also important. We invited Shapiro to speak at our Participants' Meeting at the 2000 ALA Annual Conference in Chicago. Shapiro points out that “the history of the terminology of a science or social science is a vital component of the history of that science, and an index to the terminology, setting forth the particulars of the coinage of each term, is an invaluable aid for historians of ideas.” When we set out to build a scholarly archive of important journal literature, it never occurred to us that we would be creating a powerful lexicographical tool.

Amateur etymologists can now contribute their favorite quotations to the *Yale Dictionary of Quotations* through an interactive Web site for the project, www.quotationdictionary.com.

<http://www.jstor.org>



JSTOR FACTS

January 1, 2000 - November 9, 2000

Total accesses*:	27,252,237
Searches performed:	6,664,765
Articles viewed:	4,975,916
Articles printed:	2,529,341
Pages viewed:	12,012,455
Total issues available:	40,651
Total full-length articles:	478,062
Total articles:	1,025,570
Total pages currently available:	5,975,496
Number of participating institutions:	869
Number of participating journals:	220
Number of journals available online:	124
Number of participating publishers:	120

*Cumulated total access includes only significant accesses to the database. This is to be distinguished from 'server hits', which are approximately ten times these figures.

COMMENTS

Personally, I'm thrilled that you folks have taken on the enormous task of making journals available in electronic format online. All libraries face the same problems: space, multiple users for single copy material, etc. And in our case, as ecologists, we're concerned about all the trees and forests that are cut down in the name of publishing journals and making photocopies. Without a doubt, electronic media for journals is the way to go and I'm glad it's in the hands of serious people with a good plan.

*Bianca Delfosse, Coordinadora de Apoyo a la Investigación,
Instituto de Ecología, A.C. (INECOL), Veracruz, México*

I am rather proud of what your organization is doing, and the great benefit that you are providing us with, of access to bibliographic records for a journal from its inception. I have had faculty members coming from the States thrilled to know that we are a participant.

JSTOR developers have tackled a significant problem, that of indexing and making accessible retrospective information in full text from the beginning. Because of the quality of the journals selected, I am sure that we will see in the usage pattern a great increase as we educate our users to the benefits.

Dr. Harold C. Young, Librarian, American University in Bulgaria