From the AMS Secretary

Each spring the AMS executive director presents to the Council a general report about the state of the Society. The report typically covers such topics as Society finances, meetings, the publication program, and special and ongoing projects. What follows is a slightly edited version of the text of the report presented by Executive Director John H. Ewing on April 15, 2000, at the Council meeting in Washington, DC.

A Report to the Council

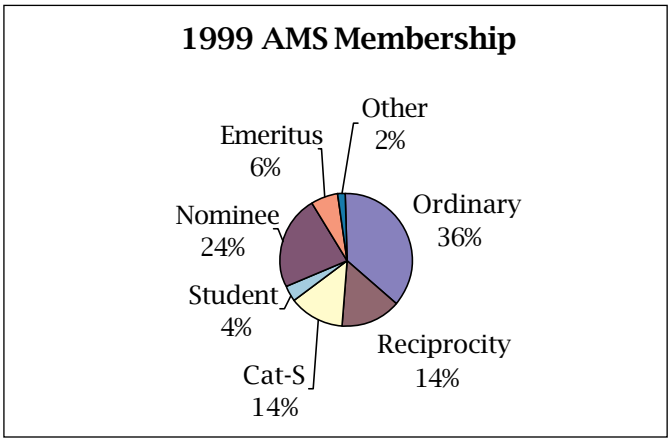
John H. Ewing

Introduction

Traditionally each spring the executive director reports to the Council on the Society; reports can be pretty dull. "The best way to become boring," wrote Voltaire, "is to say everything," and I tried to heed Voltaire's advice in recent years by choosing a particular perspective for each report—the transition in our publication program, a renewed commitment to outreach, the business side of the Society. This year's report will once again look at the Society from a different perspective, concentrating on a face of the AMS that we often take for granted.

Overview of Society

The American Mathematical Society has two distinct personalities. On the one hand, the AMS is a publisher, publishing books, journals, databases, and, increasingly, electronic products. The business of publishing mathematics is merely one way to promote mathematics, of course, but the publishing business of the Society is much more than a way to serve members: The Society's publication program is a major enterprise that competes effectively with other scientific publishers, influences mathematical publishing around the world, and generates revenue for the rest of the Society's operations. Of the $20.5 million in revenue last year, 76% came from publishing. (By comparison, only 7% came from individual dues and only 3.5% from meetings.) Of the 230 budgeted employees of the AMS, more than 175 are directly involved in publishing, and many of the rest provide publication support (for example, the Fiscal Department).

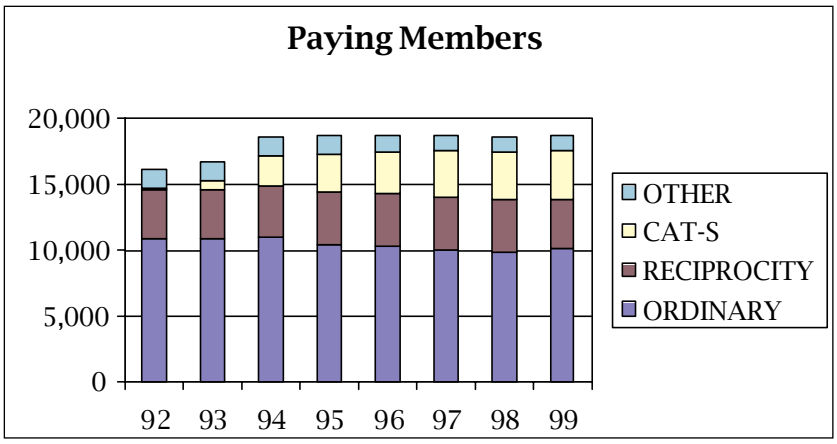


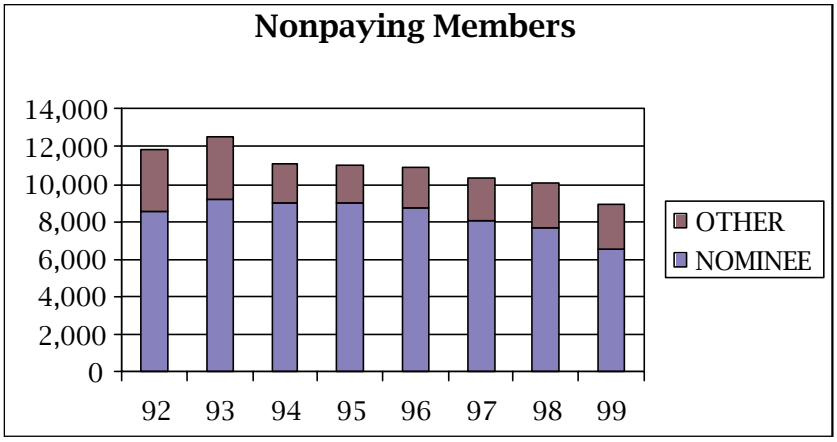
On the other hand, the AMS is a professional society with nearly 28,000 members, and about one-third of those members live outside the United States, drawn from all over the world. Nearly 7,500 members are students; another 3,800 belong through reciprocity agreements with other mathematical societies; another 3,700 are Category-S, a special arrangement that allows mathematicians in currency-weak countries to join the Society (and receive most member benefits) for only nominal dues. While the Society provides services for its members and for mathematicians more generally, it does not serve them as a trade organization or a union. Rather, it primarily serves mathematicians by promoting mathematics—all mathematics, but especially research and scholarship.

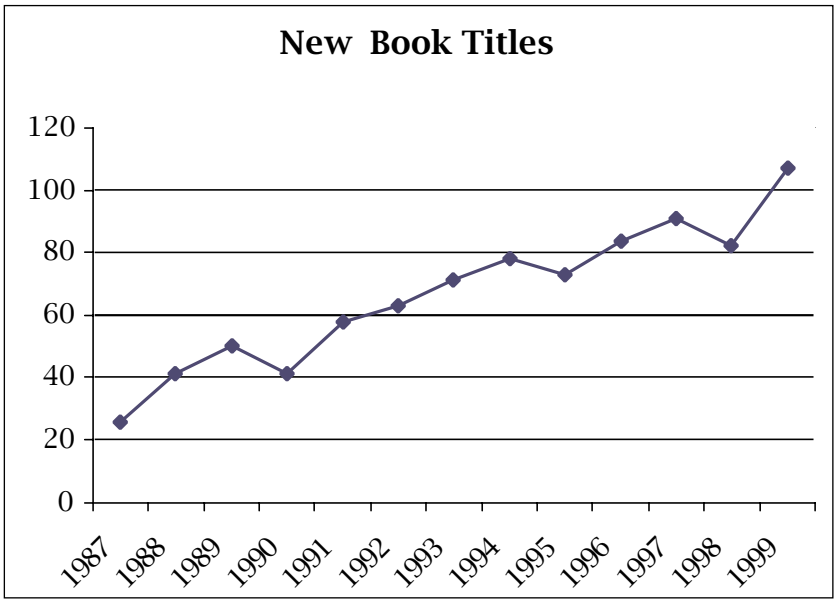
Because most of the Society's staff are in its publication program, it is natural that annual reports concentrate on

that face of the Society. That's especially true nowadays, because scholarly publishing is changing rapidly, and the AMS has been actively engaged in almost every aspect of electronic publication. It is exciting to report on innovations and progress in a rapidly changing field, and people are intrigued by that excitement. But the professional society face of the AMS is crucially important too; it's what defines us as an organization. This year's report will emphasize that face, where the innovations are exciting as well.

I will begin with a brief overview of the publication program and then devote the remaining space to a report on the AMS as a professional society.







Publisher

The American Mathematical Society publishes journals, books, and a very important database. It has people who work on every aspect of publishing—acquisitions, editing, printing, distribution, promotion, marketing, and electronic development. One entire office (Ann Arbor, MI) is devoted to assembling the Math Reviews database; another office (in Pawtucket, RI) is devoted to distribution and printing. Our two large presses each produced more than 2.5 million impressions last year—that's more than 300,000 individual books and journal issues.

In 1999 our own nine journals published nearly 15,000 pages, including over 1,000 articles. (There were even more pages and articles published in translation journals.) Every one of those pages was published in electronic form, and most were also published on paper as well. Our journal articles are now posted when ready; their references are fully linked to Math Reviews; a new interface makes them more usable than ever. Journal subscriptions reach mathematicians around the world, and the electronic versions of journals reach more and more people each year.

We published 107 new book titles last year (a record number), and we now carry over 2,500 titles in print. Book sales increase each year, and again the Web has made a difference: By the end of last year, we had sold over 20,000 books through our own bookstore since its inception. Interest has increased in almost every area—graduate texts, the new undergraduate series, popular biography, and Chelsea classics. Authors find the AMS a better place to publish, which is the key to a successful book program.

MathSciNet is upgraded each year with a new version in September. Users continue to be enthusiastic about Math Reviews on the Web (although, surprisingly, most subscribers continue to want the paper edition as well.) All reviews back to 1940 have been keyboarded in standard TEX (at a total cost of over $800,000), providing data that can be carried forward in years to come. Features such as browsing and special searching have been added. A new tool for verifying references and adding links (MR-Lookup) has been added. More than 100,000 items in Math Reviews now have links to original articles.

One of the most important changes for Math Reviews, however, is its pricing. By participating in consortia, universities and colleges that previously found it impossible to subscribe to MathSciNet can now do so at minimal cost. The number of consortia continues to grow rapidly, including entire countries and states, expanding the number of institutions around the world with access to Math Reviews.

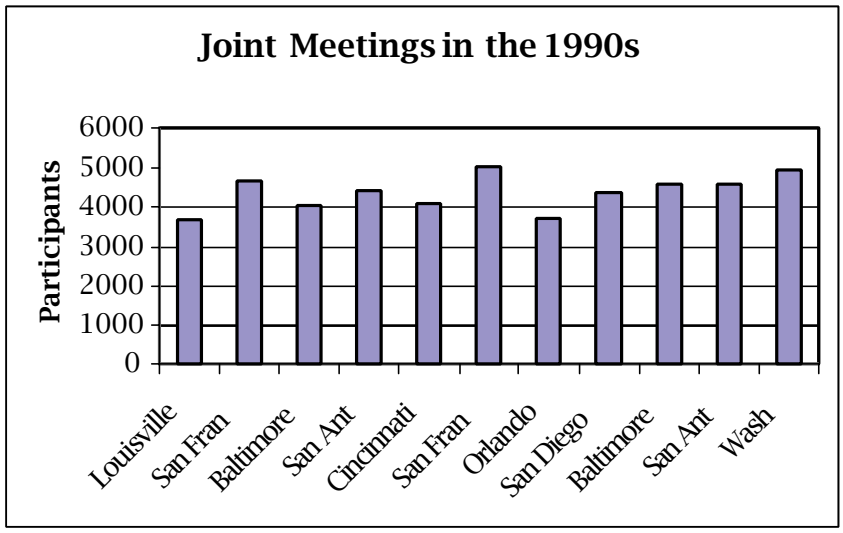
This brief summary of the AMS publishing program captures only a small piece of a large business. Publishing has always been an important part of the AMS, and today that is more true than ever. But behind that publication program is an organization that serves the mathematics community in many ways, and publication is only one of them.

Professional Society

Since its founding in 1888, the Society has been a membership organization, holding meetings and providing small services to mathematicians. In one sense a professional society doesn't merely serve the community of scholars; it creates that community. When occasionally mathematicians ask me why they ought to become members of the Society, the best answer I can think of is this: Each member of the Society contributes to programs such as those below, creating a community of mathematicians around the world. We all benefit from that community, and we all have a responsibility to support it.

What does a professional society do? From the beginning meetings have been among the most important services of the AMS, and they continue to be important today. But the Society also conducts surveys and runs employment services, hosts workshops, and carries out special projects. The AMS has also devoted much energy in recent years in Washington, representing mathematics alongside all the other sciences. And the AMS has tried to promote mathematics to various audiences—scientists, government officials, and the general public—in an ongoing program of public awareness.

Here is a sample of some of these activities from the past year.

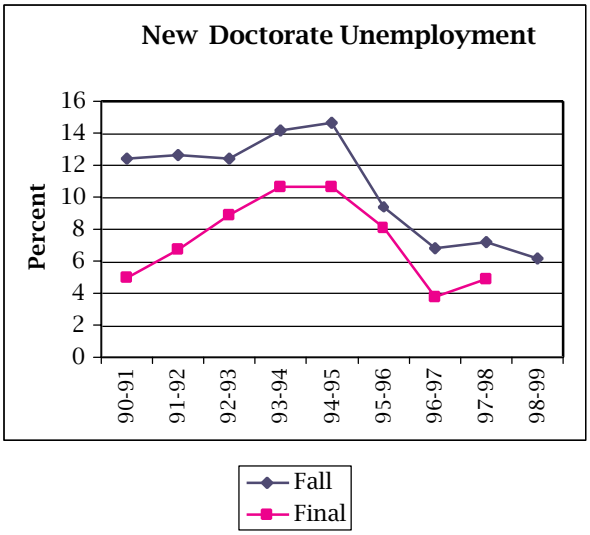


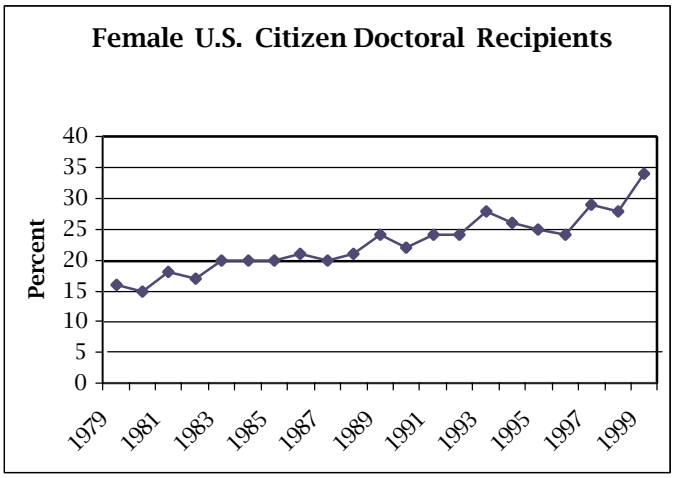
Meetings

- The Joint Meeting held in Washington this past January was joint with the Mathematical Association of America (MAA) and the Society for Industrial and Applied Mathematics (SIAM). It had nearly 5,000 attendees (close to a record), and both the program and the setting drew praise from most of those people.
- The AMS will hold a special summer meeting, Mathematical Challenges of the 21st Century, in August of 2000. The meeting at UCLA will extend over six days, include plenary lectures by thirty of the world's outstanding mathematicians, and draw many young mathematicians to meet them. This last point is made possible by a travel grant from the National Science Foundation that provides travel support to approximately 150 young mathematicians for the conference. Over 500 applications were received for those awards.
- There were eight sectional meetings of the AMS in 1999, and attendance at these meetings continues to increase each year. International meetings were held jointly with the Australian Mathematical Society (in Australia) and the Mexican Mathematical Society (in the United States). During this year there will be international meetings held in Denmark and Hong Kong.
- Summer research conferences, joint with SIAM and the Institute for Mathematical Statistics (IMS), have been held for a number of years. These will continue in the future, funded by a new grant from the NSF this past year. The slightly new format provides for more flexibility, and during the most recent competition there were a record number of proposals submitted—a healthy sign that summer research conferences remain appealing and relevant.

Young Mathematicians

- Each year the AMS runs an employment register at the annual meeting. The old format was greatly expanded recently, allowing both mathematicians and departments to use the register in a variety of ways. This past January there were 343 mathematicians and 152 employers—healthy numbers and a healthy ratio.
- In addition to the employment register, the Society provides a job seekers service each spring, giving young mathematicians an opportunity to let potential employers know they are still on the market (once the recruitment process is well under way).
- This year the Society has started a new program, aimed at our youngest mathematicians. Programs for talented high school students in mathematics have existed for many years. These young scholars programs are carried out each summer in a few universities throughout the country, run by dedicated people who have changed the lives of many of today's mathematicians. And yet the programs continue to struggle. The Society has started a program of small competitive grants to selected programs, and it seeks a permanent way to fund that effort.





Survey Work

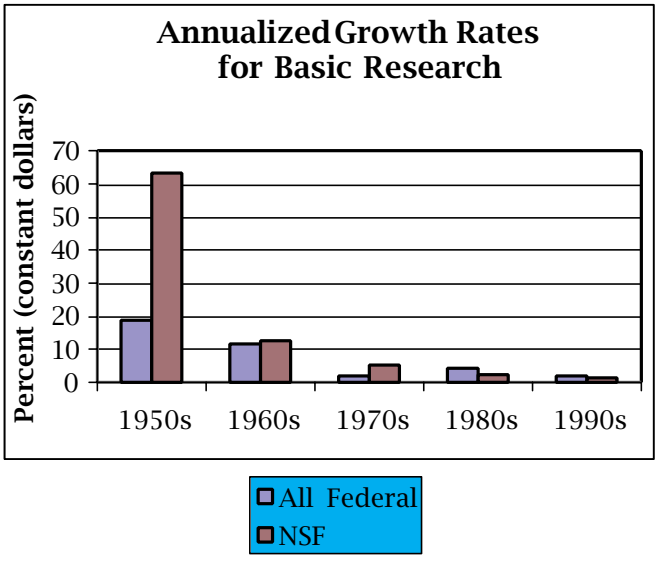
- Each year the AMS conducts an annual employment survey of young mathematicians, joint with the MAA, the American Statistical Society (ASA), and the Institute for Mathematical Statistics (IMS). That survey provides the mathematics community with information that is more complete than that available in almost any other discipline.
- Every five years the staff at the AMS supports a comprehensive survey under the aegis of the Conference Board for Mathematical Sciences. That survey investigates everything from course enrollments to faculty aging, and it provides comprehensive data going back to the 1960s. The survey is funded by the National Science Foundation but administered by the Society.
- On a limited basis the Society now provides comparative salary data for our institutional members. These individualized studies can provide crucial information to a chair in understanding how the salary structure of a department compares to a small group of similar departments across the nation.

Special Projects

- After a number of years of work, the Task Force on Excellence completed its work in 1999. The book that was published (*Towards Excellence*) was printed, distributed, and reprinted. That book advocates thoughtful self-examination by mathematics departments and provides some useful advice and examples. The work of the Task Force was capped by a "leadership conference" involving approximately seventy-five leaders from mathematics departments around the country.
- Following the work of the Task Force on Excellence, the Society put in place several new programs. There is now an annual workshop for chairs of departments held immediately before the Joint Meetings; that workshop concentrates on specific issues and problems that face chairs day-to-day in running a department. The AMS also will continue to hold focus groups for chairs at its meetings, bringing together leaders of departments across the country to share both successes and failures. Finally, the AMS has made a commitment to expand data collection and survey work so that department chairs have more information in the future.
- The Society runs a variety of other special workshops and programs, sometimes funded by agencies or private organizations. The nonacademic employment project (joint with SIAM and the MAA) is nearing completion. A Preparing Future Faculty project (joint with the MAA) is currently under way, providing grants to four doctoral departments that will serve as models. The second of two workshops on professional master's degree programs (joint with the Mathematics and Education Reform network and SIAM) was held last year. A conference for faculty who run Research Experiences for Undergraduates (REU) programs was run by the Society in October of 1999. The aim of that conference was to share common experiences and to collect material to promote such programs in the future.

Government Relations

- Reaching out to Congress and other parts of the government is an ongoing activity for our Washington office. Each spring there are two days set aside for large



Compiled by Sam Rankin 1999.

numbers of scientists to make congressional visits. But throughout the year there is an ongoing effort to set up visits between mathematicians and members of Congress. Working with congressional staff on a daily basis is equally important.

- There are special events to further this process. Each year the AMS sponsors a Congressional Luncheon to which members of Congress (and their staffs) come to hear about a small piece of mathematics. In 1999 DeWitt Sumners talked about mathematical biology; the year before, Carl Pomerance talked about encryption.
- We have held several town meetings for congressional representatives in recent years. Most recently there was a meeting for Congressman Rush Holt at Princeton and another for Congressman Michael Capuano in Cambridge. Scientists and mathematicians come to such meetings to exchange views with the congressmen, and this helps to build connections with key people in Congress.
- The most important Washington activity is the most subtle—networking with other science and technology groups. Being a part of the enormous scientific establishment in Washington makes mathematics more visible; it gives mathematicians a voice and some presence when decisions are being made. Going to meetings, participating in initiatives, holding receptions—these all sound like simple, social activities. But they are essential to working in Washington.

Public Awareness

- Public awareness includes making mathematicians themselves aware of interesting mathematics. The *Notices* has done a spectacular job in carrying that out in recent years. The rejuvenated *Bulletin* is beginning to do the same.
- At a high level (for scientists and the scientifically minded), *What's Happening* is a series of books that explains some of the exciting new areas and developments in mathematics in recent years.
- Our special public awareness section of e-MATH (*What's New in Mathematics*) has some first-rate material for general audiences. Unfortunately, it's hard to attract large audiences to that material in spite of its quality.
- The Society also puts out news releases regularly, contacts newspapers and other media for our national meetings, and cultivates key science reporters throughout the country.
- For the long term, the Society is trying to build a group of people who are both mathematically and media trained. Each year, we participate in the media fellows program of the American Association for the Advancement of Science, sponsoring one or two young mathematics graduate students who spend a summer working at a newspaper, magazine, or station. Over time, these people either become mathematicians with media experience or they become media people with some mathematical training. We win in either case.

This is a sample of recent activity, and it may not include some services considered most useful by some members. The *Combined Membership List* is used by almost all mathematicians. The *Professional Directory* is used by most departments. Our series of "how to" books on teaching or chairing or simply entering the profession are widely read and admired. e-MATH provides information and reporting used constantly by the community. These are all services that many people take for granted as part of the Society's ongoing activity.

Which is the most important face of the AMS? What are the most important services? Which parts should members value most? Of course, none of these questions makes sense. A professional society thrives on its many faces, and all faces are necessary for its health. That is a maxim that is forgotten by passionate constituencies from time to time; it is a maxim worth remembering.

Preliminary List of Candidates for 2000 AMS Election

Vice President

Ingrid Daubechies
M. Susan Montgomery

Trustee

John B. Conway
Douglas A. Lind

Member at Large of the Council

Walter L. Craig
Keith J. Devlin
Irene Fonseca
Joel Hass
William James Lewis
Paul S. Muhly
Alexander J. Nagel
Irena Peeva
Louise A. Raphael
Hema Srinivasan

Nominating Committee

Jonathan Alperin
Irwin Kra
Cora Sadosky
Audrey A. Terras
Thomas W. Tucker
Steven H. Weintraub

Editorial Boards Committee

Paul R. Blanchard
Tony F. Chan
Jane Gilman
Paul R. Goodey