

The Academy of Natural Sciences
2008 Annual Report

THE ACADEMY AT WORK



Dear Friends of the Academy,

The theme of this 2008 Annual Report is “The Academy at Work.” Indeed, we have been working hard! We continue to advance ecological research and lengthen our list of environmental services for local and federal agencies. Halfway around the world, our scientists are helping the people of China and Mongolia to develop capacity to protect their own environment. Here in Philadelphia, our public programs help those who are not scientists appreciate the wonder and importance of the natural world. This past year alone, we established a Center for Environmental Policy and launched a preschool science education initiative that could become a model for the nation. And, every day we are making our collections more accessible to the world. We also are putting the final touches on a visionary master plan for the Academy’s building and exhibits, the goal of which is to make sure that the place where we work and engage visitors will support a future for the Academy that is worthy of its storied past. While the text of this report focuses in detail on the great scope and depth of the Academy’s work in 2008, in this letter we ask you to consider for a moment what the Academy means to our planet.

Each day we are losing ground. Nature’s biodiversity is degrading through climate change, exploitation, and the simple conversion of natural landscapes to concrete, asphalt, and other accommodations for human settlement. Biodiversity—the different kinds of wild, living things, where they live, and the research to protect them—is the focus of the Academy.

We are the keepers of the codes of life. We have the collections, and our curators, scientists, and educators understand biodiversity. We study and document the

many kinds of life, where they are, and how they live, or lived. Our collections include millions of specimens taken centuries ago in life and fossils that lived millions of years in the past. We study their form and function, their DNA, their evolutionary paths, and the ways in which human society impacts them, and us. We do this so that our own species can truly understand the natural history of life on Earth. And, we study them so that we can guide our own behavior toward a planet that is rich with living things and healthy for us all. It’s a tall order, but a worthy one.

Some of what we do is very specific and immediate. We can identify and help to interdict the importation of a non-native snail that would have caused great harm to our environment, and to our economy, if it had sneaked in on a shipment from abroad. We can find the genes that prove a population of fish is unique and that it warrants the full protection of the Endangered Species Act.

We also tend to the broad. Our work helps the everyday citizens of Earth to understand the scope, texture, and importance of nature. Governmental policies, including environmental, ebb and flow with political tides, but the Academy, as keeper of the codes of life, holds and articulates a deeper and a more constant wisdom.

That is why the Academy of Natural Sciences is a treasure for us all. We thank you deeply for the support you have given to it, and we thank you for what we know you will do to sustain the Academy in the future.

Sincerely,

Bill Brown *Jim Macaleer*
Bill Brown R. James Macaleer



TURNING A PLAN INTO WORK

In 2007, the Trustees of the Academy adopted a five-year Strategic Plan that extends to this institution's 200th anniversary in 2012. Since then, the staff of the Academy has been hard at work putting this plan into action.

The Strategic Plan sets forth four program goals:

Improving understanding of the diversity, ecology, and evolution of life

Developing and applying science to protect the environment

Advancing public interest and engagement in natural sciences and environmental issues

Preserving the heritage of natural science in specimens, images, words, and numbers

Together, these four goals define the work of the Academy of Natural Sciences. They have done so for many years, certainly long before being committed to paper and approved by the Board of Trustees. And yet, these recent acts of codification and endorsement have helped reaffirm a set of commitments that has guided the work of the Academy since its founding.

This year's annual report is a snapshot of how, over the past 12 months, staff members of the Academy have embraced these four program goals in their day-to-day work.



IMPROVING UNDERSTANDING OF THE DIVERSITY, ECOLOGY, AND EVOLUTION OF LIFE

Academy scientists work to understand and record the history of life, and to make that knowledge accessible to fellow scientists and the public. In 2008, projects and field work led Academy scientists to Uruguay, Russia, Mongolia, South Africa, Zambia, Canada, and England, as well as locations across the United States—in total, more than 65 research trips.

Curator of Malacology Dr. Gary Rosenberg spent two weeks in the Philippines as part of a major new research collaboration between American and Philippine scientists. Funded by the National Institutes of Health, the National Science Foundation, and the U.S. Department of Energy, this project has the ambitious aim of cataloging the biodiversity of mollusks that inhabit the waters of the Philippine archipelago—an estimated 10,000 species. Over the next five years, Rosenberg and his colleagues will be using the results of this large-scale survey to inform a variety of practical outcomes, ranging from pharmaceutical applications to environmental conservation policies.

The Academy's long-standing research relationship with Mongolia continued through a number of projects, among them a new survey of aquatic insects of the Selenge Basin being funded by the National Science Foundation. In July, under the direction of Curator of Entomology Dr. Jon Gelhaus, a team of scientists sampled 50 separate sites in western Mongolia. The thousands of insect specimens they collected were shipped back to the Academy, where they are being sorted by local university students before being sent to various specialists for final identification.

Once complete, this survey will provide the Mongolian government with a yardstick for monitoring water quality.

Locally, Curator of Diatoms Dr. Marina Potapova received a grant from the Pennsylvania Department of Conservation and Natural Resources for a comprehensive survey of diatoms (single-celled algae) that live in pristine, undisturbed aquatic habitats in north-central Pennsylvania. Despite the close proximity of these study sites, information about their diatom populations is so limited that Potapova's work will provide useful new data on this region's species. Potapova also received a National Science Foundation grant to upgrade and digitally catalog the Academy's Diatom Herbarium, the largest of its kind in the country and the second largest in the world.

The Academy's Fisheries Section, under the direction of Dr. Richard Horwitz, also focused on local waters, studying the conservation genetics of the locally endangered minnow, the Bridle Shiner (*Notropis bifrenatus*). Academy scientists discovered that local populations suffer from isolation and lack of genetic diversity. Information from these studies may help Academy scientists accurately pinpoint the period of time for the species' population decline.

Whether working close to home or thousands of miles away, there is a common thread that runs through all the Academy's research programs—study living things and systems before they and the useful insights they provide are lost forever.



Dr. Gary Rosenberg examines mollusks at the Marine Science Institute at the University of the Philippines.



Dr. Marina Potapova oversees the Academy's Diatom Herbarium, the second largest in the world.



Entomology Curator Dr. Jon Gelhaus prepares crane fly specimens in his tent in Mongolia for transport back to the Academy for further study.



DEVELOPING AND APPLYING SCIENCE TO PROTECT THE ENVIRONMENT

For more than 60 years, the Academy has been a leader in environmental research. What began as a one-person department of limnology has grown into the interdisciplinary Patrick Center for Environmental Research made up of more than 30 scientists and support staff with multiple areas of expertise. Year after year, the Academy works to extend the reach of its environmental research capabilities.

In April 2008, this reach stretched halfway around the world with the establishment of the Asia Center. Under the direction of Dr. Clyde Goulden, this new initiative will build on 15 years of research in Mongolia and forge international partnerships for the study, protection, and sustainable use of environmental resources throughout Asia.

One of the first partnerships established by the Asia Center was with Nanjing University, one of China's oldest institutions of higher learning. In August, students from the university's School for the Environment traveled to Philadelphia to attend a water quality monitoring workshop led by Academy researchers. Two months later, Drs. David Velinsky (Environmental Biogeochemistry) and Ling Ren (Phycology) traveled with Goulden to China to meet with scientists from Nanjing University and China EPA at Tai Hu (Lake Tai), near the city of

Wuxi. They discussed water quality concerns for the lake and began making plans for future workshops and a scientist exchange program. Ren and Velinsky then traveled to Zhoushan Island to attend a mariculture symposium and represent the Academy at the 50th anniversary of Zhejiang Ocean University.

In addition to these global initiatives, the Academy took a major step in positioning itself as a local environmental resource with the establishment of the Center for Environmental Policy, made possible by a grant from the William Penn Foundation. The Academy identified a need in Philadelphia for high-level environmental discussions, and the Center serves as host for a variety of lectures, forums, and panel discussions of critical environmental and scientific topics.

In October, the Patrick Center expanded its research capabilities with the hiring of Dr. Jerry Mead as Curator of the Watershed and Systems Ecology Section. Mead's expertise in the computer modeling of complex ecological systems complements the Academy's strengths in aquatic biology, chemistry, and ecology.

By joining forces across departments, the Academy is working to promote innovation through collaboration and develop tools that protect the environment.



Dr. David Velinsky hosts students from China's Nanjing University in August 2008.



Dr. Jerry Mead is an expert in watershed and fisheries ecology and heads the Academy's Watershed and Systems Ecology Section.



Dr. Clyde Goulden meets with nomad leaders to discuss impacts of climate change on local environments of northern Mongolia.



ADVANCING PUBLIC INTEREST AND ENGAGEMENT IN NATURAL SCIENCES AND ENVIRONMENTAL ISSUES

The Academy is all about learning—not sit-and-listen or stand-and-look learning, but discovery-based, hands-on learning that inspires life-long passion for the natural sciences. In 2008, Academy educators developed a number of new experiences that brought a sense of wonder to learners of all ages.

This year marked the completion of one major educational collaborative and the beginning of another. Since 2003, the Academy has been part of the Community Ambassadors in Science Exploration (CASE) program, a collaborative project between four local science museums and eight local community-based organizations that serve underserved families in Philadelphia and Camden. Over the past five years, CASE trained 142 community ambassadors who have presented more than 300 family science workshops to 14,000 people.

The Academy received grants from the Barra Foundation and PNC Grow Up Great to launch *A Head Start on Science*. This two-year collaboration between science educators and early-childhood specialists from the Academy, Please Touch Museum, and the School District of Philadelphia aims to raise the standard for science education at the preschool level.

For adults, the Town Square lecture series had its most successful year to date—more than 3,400 participants attended 21 programs. Topics included sustainability, global warming, environmental awareness, and public

science. Two of the programs were preceded by day-long, expert-led workshops.

In addition to formal programs, this past year also saw a number of activities and events that celebrated the Academy's core strengths: collections and scientific research. In August, Bug Fest was a weekend-long celebration of wings, stingers, antennae, and exoskeletons. In September, Academy members explored the back hallways of the Academy and met with scientists and staff at the first Members' Night. Due to tremendous response from the public, both Bug Fest and Members' Night will become annual events at the Academy.

In November, a special exhibit commemorated the 150th anniversary of the description of the world's first dinosaur skeleton in "*Hadrosaurus foulkii*: The Dinosaur That Changed the World." Featuring the mounted skeleton of *H. foulkii*, the exhibit told the little-known story of how this Cretaceous-era plant eater from New Jersey became America's first celebrity dinosaur, and the Academy became the world's first museum to display a complete dinosaur skeleton.

Through its programs, festivals, special events, and exhibits, the Academy is committed to providing the community with many different opportunities to learn about the natural world. As science evolves and the needs of the community change, the Academy will keep pace by offering experiences that inform, engage, and inspire.



Fisheries Biologist Dave Keller shares some highlights of his work at the first Members' Night.



The Academy's program *A Head Start on Science* encourages a passion for science in the youngest of naturalists.



Visitors of all ages learn of the discovery and display of *Hadrosaurus foulkii*, a story that belongs only to the Academy.



PRESERVING THE HERITAGE OF NATURAL SCIENCE SPECIMENS, IMAGES, WORDS, AND NUMBERS

Much of the work of the Academy takes place far from the public galleries, in small rooms and narrow corridors tucked deep inside the building. More than one-third of the facility is devoted to housing collections and library materials. Numbering more than 17 million specimens, 200,000 books, and 250,000 manuscripts, maps, archival objects, and works of art, these holdings provide an unparalleled resource for researchers and educators alike.

With the age of digitization comes a whole new level of preservation. In many cases, curation includes not just the care of the physical specimen, but the creation of a digital version as well. The Academy undertook two such large-scale digitization projects last year. In the Botany Department, two high-resolution scanning stations were set up as part of the Latin American Plant Initiative (LAPI), an international partnership funded by the Andrew W. Mellon Foundation. One of the outcomes of the partnership will be an online database of information and images of type specimens held in the world's major herbaria—including the Academy's.

In Ichthyology, a digital X-ray machine was installed. Purchased with funds from the Hattersley Family

Foundation Collections Care Upgrade Fund, this state-of-the-art equipment replaced the film-and-chemical setup the Academy had been using since the 1970s. The new X-ray facility has already been pressed into service imaging all 2,800 type specimens in the Ichthyology collection.

The Academy's Ewell Sale Stewart Library came under new leadership with the appointment of Dianne Mizzy as Library Director. Among her first tasks was to improve environmental controls and security measures in the historic Reading Room of the Library. Within months of her arrival, protective UV film was installed on the windows and revised user guidelines were put into practice, making the Library a safer place for irreplaceable library materials and a more pleasant place for researchers to work.

Throughout the year, the Academy's dedicated team of curators, collections managers, and library specialists devote their days to caring for the collections—both natural history specimens and library holdings. Their hard work ensures that these treasures will be available for generations to come.



In 2008, the Academy welcomed Dianne Mizzy as Library Director.



Ornithology Collection Manager Dr. Nate Rice carefully mounts a specimen of a Hermit Thrush (*Catharus guttatus*).



Curator of Botany Dr. Tanya Livshultz is part of an international partnership to create an online database of Latin American plants.

YEAR IN REVIEW

January

10

Paleontology associate Douglas Rowe receives the Harrell L. Strimple Award, the highest national honor given to a non-professional for their contributions to paleontology by the Paleontological Society.



February

5

The Academy hosts a reception in the rotunda of the Capitol in Harrisburg. Federal and state legislators meet with scientists and staff and get a private viewing of treasures from the collections.

9

The Academy opens "Ends of the Earth: From Polar Bears to Penguins," a special exhibit that takes visitors on the coolest adventure in the world—to Earth's polar regions.

16–18

The Academy offers "Presidential Hair" over the holiday weekend. More than 5,400 visitors examine locks of hair belonging to the first 12 U.S. presidents, including George Washington.



25–28

The Academy welcomes enthusiastic young scientists as it hosts the 29th annual George Washington Carver Science Fair for Philadelphia elementary students.



March

24

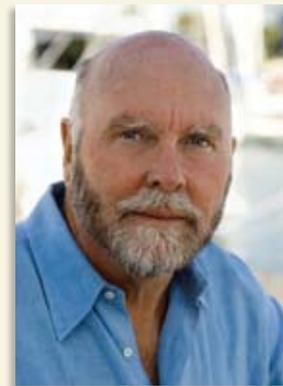
The story of *Tiktaalik roseae* joins the Academy's newly refurbished permanent exhibit "Science at the Academy." *Tiktaalik* is a 375-million-year-old transitional fossil—dubbed the "fishapod"—co-discovered by Academy paleontologist Dr. Ted Daeschler.



April

10

One of America's most influential scientists, Dr. Craig Venter, kicks off the spring Town Square series. Venter, a pioneer in mapping the human genome, shares his latest scientific breakthroughs with a curious crowd.



May

7

The Academy welcomes two new members to its Board of Trustees: Kathryn Smith Frorer, of Bryn Mawr, and Kenneth J. Warren, of Haverford.

10

Noted ornithologist and author Kenn Kaufman visits the Academy for a presentation of his experiences and a book signing in celebration of International Migratory Bird Day.

15

The Academy is one of several recipients of a \$4 million grant from the National Institutes of Health. It will fund the Philippine Mollusk Symbiont International Cooperative Biodiversity Groups project, which aims to provide new information to catalog and preserve diverse mollusk species while providing scientific opportunities for the Philippines.



22–24

The Academy hosts "North by Degree," an international Arctic Exploration Conference and rare film festival in honor of the International Polar Year.

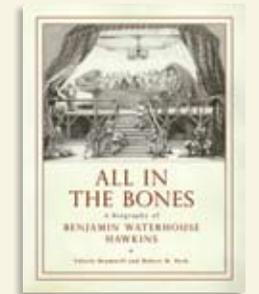
30

The Academy holds its 196th Annual Meeting with special keynote speaker Dr. Baldomero M. Olivera, a world expert on shellfish toxins and pharmaceutical toxicology.

June

1

The Academy publishes the first full-length biography of British artist and naturalist Benjamin Waterhouse Hawkins. *All In the Bones: A Biography of Benjamin Waterhouse Hawkins* is co-authored by Robert M. Peck, Senior Fellow at the Academy, and Valerie Bramwell, the artist's great-great-great-granddaughter.



2

The Academy welcomes eight students from colleges across the country to the 11th annual Research Experiences for Undergraduates (REU) program.



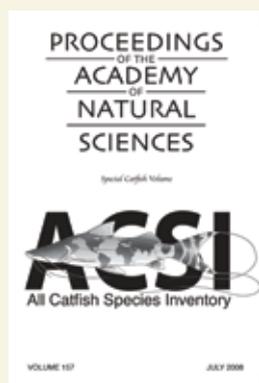
9

Retired Academy mailroom supervisor Frank Gallagher receives a special tribute when Academy ichthyologist Dr. Mark Sabaj Pérez names a new species of catfish *Rhinodoras gallagheri* in his honor.



July

7 Volume 157 of the *Proceedings of the Academy of Natural Sciences* is published. It contains 13 scientific articles authored by 25 Academy staff and associates in the All Catfish project, and descriptions of more than 120 new species.



19-20

Visitors to the Academy celebrate Gregor Mendel's 186th birthday with science presentations, live animal shows, and pea-colored cupcakes.



August

3-15 The Academy hosts 12 students and professors from China's Nanjing University. The group participates in an aquatic ecology workshop sponsored by the Academy's new Asia Center.



16-17

The Academy goes buggy all weekend! 2,400 visitors enjoy roach races, an insect-cooking competition, live tarantulas and scorpions, and even a flea circus at the first Bug Fest.

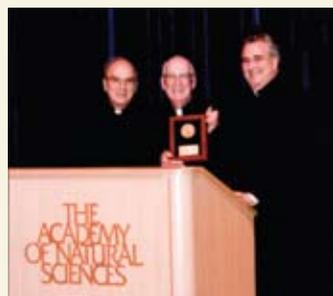


21

The Academy receives two grants from The Andrew W. Mellon Foundation. The first, for \$99,000, supports the digitization of nearly 9,000 type specimens of Latin American and African plants in the herbarium. The second, for \$22,500, funds a workshop among the leaders of some of the world's top natural history institutions to discuss new ways to support collections.

September

6 Villanova University holds its annual Mendel Medal award ceremony at the Academy to coincide with the exhibit, "Gregor Mendel: Planting the Seeds of Genetics." This year's award recipient is the Rev. George V. Coyne, S.J., Ph.D., an astronomer and former director of the Vatican Observatory.



25

Dr. Keith Thomson, professor emeritus of natural history at University of Oxford and former Academy president, gives a talk and signs copies of his latest book, *The Legacy of the Mastodon: The Golden Age of Fossils in America*.

26

More than 700 members attend the Academy's first Members' Night. They spend the evening exploring behind-the-scenes areas, meeting with Academy scientists and staff, trying their hand at doing science, and viewing seldom-seen treasures.



30

The Academy Auditorium upgrades its sound system and installs high-definition projection, thanks to a \$30,000 grant from the Forrest and Frances Lattner Foundation.

October

1 Thanks to funding from the William Penn Foundation, the Academy establishes the Center for Environmental Policy within the Patrick Center for Environmental Research. The Center develops specialized programs to strengthen the Academy as a venue for discussion of environmental issues.

11-13

The Academy partners with the Philadelphia Shell Club to host the 26th annual Philadelphia Shell Show. In addition to the displays, tours, and international market, this year's event also includes a special preview dinner that raises \$38,000 for the Malacology Department.

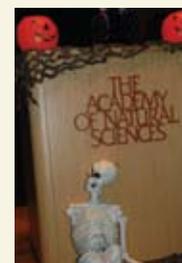


24-31

A team from the Conservation Lab at Yale University's Peabody Museum spend a week at the Academy conserving its 2,200-year-old Egyptian mummy. The mummy and its beautifully decorated coffin will be featured in an upcoming traveling exhibit, "Lost Egypt: Ancient Secrets, Modern Science," produced by Ohio's Center of Science and Industry.

31

Costumed campers spend the night with eerie and spooky specimens at the Academy's annual Halloween Spooktacular Safari Overnight.



November

5 The Academy hosts the annual Cheryl Beth Silverman Intern Reception honoring high school interns working in Outside In. This year's honorees are Julie Pakstis, Fadwa Kingsbury, and Daniel "D.K." Kurnick.

22

The special exhibit "*Hadrosaurus foulkii*: The Dinosaur That Changed the World" opens to the public—150 years to the day after Dr. Joseph Leidy first introduced *H. foulkii* to the world during a meeting held at the Academy on November 22, 1858.



December

23 The Ichthyology Department enters the digital age with the installation of a new digital X-ray machine.



Dr. Charles W. Reimer 1923-2008

This past year, diatomists around the world mourned the death of Dr. Charles Reimer, distinguished scholar of diatoms and Emeritus Curator of Diatoms at the Academy.

During World War II, Dr. Reimer served as an interpreter in Normandy and Alsace-Lorraine, where he was severely wounded and held captive until the end of the war. After his recovery, he returned to his studies at Butler University and went on to earn his Ph.D. in botany from Michigan State University.

Dr. Reimer joined the Academy in 1952 as an Assistant Curator in the Department of Limnology. Eight years later, he became the Curator of the Academy's Diatom Herbarium, a position he held for more than 30 years. Even after his retirement in 1991, he continued to maintain the Herbarium until his death on November 29, 2008.

Dr. Reimer was a charismatic figure in the diatom world, a co-author (with Dr. Ruth Patrick) of the two-volume monograph, *The Diatoms of the United States*, and a mentor to an entire generation of American diatomists. His passing is felt deeply throughout the scientific community.

RECOGNITION (as of December 31, 2008)

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 Paul Callomon
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Volunteers from 13 to 85, and from all sections of Philadelphia and surrounding counties, are engaged in the work of the Academy. Motivated by a life-long quest for knowledge and the desire to support an institution they love, volunteers work with educators, administrators, and scientists in nearly every department of the Academy. Forty percent of our volunteers are teens who gain important life skills and explore future careers in education, animal care, and science. During 2008, volunteers contributed 29,775 hours of work to the Academy.

The following 85 each contributed more than 100 hours during the year.

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Albert Aldinger III	Miki Inagaki Radack	Matthew Ranson
Robert Allen	Susan Joshi	Julie Reich
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Sara Berlin	Jaclyn Kahn	Awma Rinchhuanawma
Shamera Boozer	Heather Rose Kates	Harriet Robertson
DonEl Brown	Patrick Kerboul	Gloria Juliana Rosales
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Aja Carter	Liz Klein	Sara Saxby
Rachel Castro-Diephouse	Deborah Kogan	Carolyn Schilgen
Sean Cochran	Diane Kontomus	Lia Semenuk
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Laura Del Collo	Daniel Kurnick	Niki Taylor
Stephanie DeMora	John Laberee	Ramon Torres
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Anita Eisenberg	Amber Levy	John Vetter
Curt Elderkin	Edward Lonergan	Albert Visco
Loralei Euchler	Phuc Luong	Kasey Volpe
Leonard Evelev	Eleanor Mayne	William Yancey
Stephen Floersheimer	Joann Miller	Jay Weiss
Michele Frank	John Nark	Sari Widman
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Kathleen Glica	William Graham Payne	Marcia Zanger
Dan Graf	Gerri Peevers	Sean Zerbe
Jane Heintz	Jason Petyk	
Lawrence Henderson	Brianne Preston	

PUBLICATIONS (as of December 31, 2008)

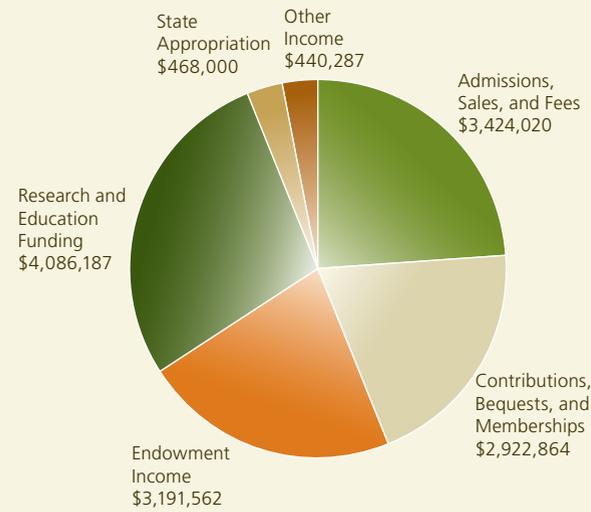
In 2008, Academy staff and associates authored 48 scholarly works. Names of Academy authors are in boldface.

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FINANCIALS (for the year ending December 31, 2008)

REVENUE AND SUPPORT 2008



Admissions, Sales, and Fees	\$3,424,020
Contributions, Bequests, and Memberships.....	\$2,922,864
Endowment Income	\$3,191,562
Research and Education Funding	\$4,086,187
State Appropriation	\$468,000
Other Income	\$440,287

Total Revenue
excluding investment activity (chart on left).....**\$14,532,920**

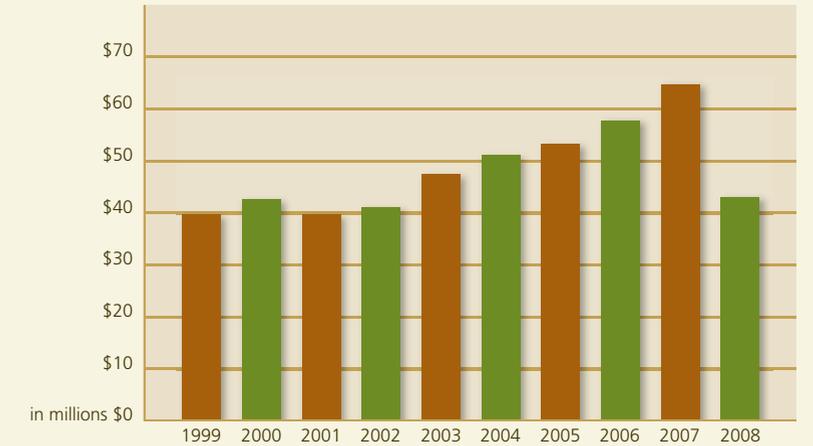
Investment Activity

Total Revenue
including investment activity

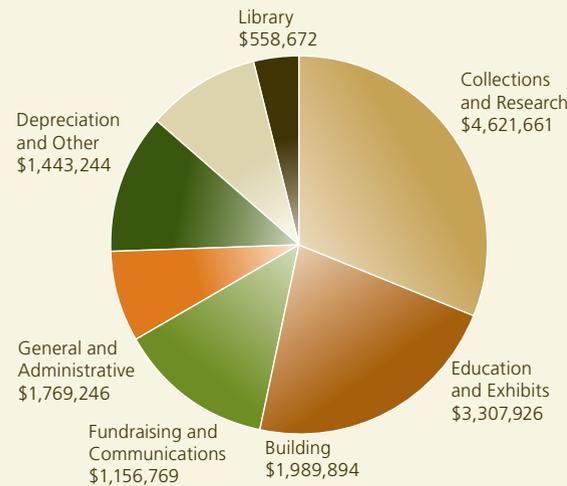
ENDOWMENT GROWTH

Year-end Endowment Market Value (MM)

1999.....	\$39.781
2000	42.690
2001.....	39.794
2002	41.146
2003	47.463
2004	51.066
2005	53.23
2006	57.827
2007	64.743
2008	43.115



EXPENSES 2008



Collections and Research.....	\$4,621,661
Education and Exhibits.....	\$3,307,926
Building	\$1,989,894
Fundraising and Communications.....	\$1,156,769
General and Administrative	\$1,769,246
Depreciation and Other	\$1,443,244
Library	\$558,672

Total Expenses
before accounting principle change (chart on left)

Cumulative Effect of
Accounting Principle Change.....

Total Expenses
including accounting principle change.....

NET ASSETS

Net Assets, Beginning of Year . . . \$90,502,205
 Net Assets, End of Year \$62,313,142
 Change in Net Assets. (\$28,189,063)

STAFF (Represents regular staff members working 20 hours per week or more as of December 31, 2008.)

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Robert M. Peck, *Academy Senior Fellow*
Pamelalynne Ramirez, *Executive Assistant to the President*

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Accounting and Finance

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Richard D'Ulisse, *Controller*
Lori McCole, *Budget Director*

Michael Minko, *Senior Accountant*
Roz Stellabotte, *Accounts Payable Specialist*

Mike Tarter, *Grants/Contracts Accountant*

Building Operations

George Casey, *Custodian*
Rena Coleman, *Custodian*
Denise DiCristino, *Administrative Assistant*
Aaron Temple, *Maintenance Specialist*
Curtis Williams, *Custodial Supervisor*
Margaret Williams, *Custodian*

Carl Zuccarelli, *Facilities Manager*

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Loretta Brookins, *Human Resources Specialist*

Information Technology

Joseph Resnick, *Director*
Benjamin Krevitz, *Technical Analyst*
Pat Riccio, *Systems Administrator*

Security

David Taylor, *Chief of Security*
Vinetta Roberts, *Security Officer*

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Pat Soda, *Office Manager*

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Katie O. Clark, *Writer/Editor*
Dennis Murphy, *Web Manager*
Teri Scott, *Marketing Manager*

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Tiffany Allen, *Head Start on Science Coordinator*
Hollie Barattolo, *Teacher Naturalist*
Michele Bassler, *Outreach Supervisor*
Bar Carter, *Mammal Keeper*
Marie Gilbert, *Birthday Party Coordinator*
Janette Grieb, *Teacher-Naturalist, Living Exhibits Liaison*

Leigh Lightner, *Mammal Keeper*

Jennifer McCloskey, *Outside In Coordinator*
Laura McRae, *Manager of Living Exhibits*

Michelle Morici, *Safari Overnight/ Scout*

Exhibits

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Michael Beers, *Exhibits Preparator*
Rich Clark, *Audio Visual Manager*
Stephanie Gleit Weinstein, *Graphic Designer*
Gene Nopper, *Senior Graphic Designer*
Jennifer Sontchi, *Manager of Exhibit Projects*
Bruce Tepper, *Senior AV Technician*

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Wilbur To, *Sales Associate*

Museum Shop

Hank Hejnar, *Director*
Marianne Bascelli, *Assistant Director*
Kathy Danowsky, *Shop Supervisor*

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Daniel E. Corti, *Senior Manager*
Janice Brown, *Sales Office Manager*
Kelly Morgan Donahue, *Floor Supervisor*
Dara Gross, *Reservationist*

Maggie Gummere, *Assistant Manager*

Sheila Knox, *Cashier*

Stacey Wright, *Commons Room Supervisor*

Volunteer Services

Lois Kuter, *Volunteer Coordinator*

SYSTEMATICS AND LIBRARY

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Dr. Ted Daeschler, *Vice President for Systematics and Library*

Kristen Marie Kepics, *Office Manager*

Daniel H. Snyder, *Science Administrative Director*

Botany

Dr. Tatyana (Tanya) Livshultz, *Assistant Curator*
Elana Benamy, *Curatorial Assistant*

Alina Freire-Fierro, *Collection Manager*

Dr. Richard McCourt, *Associate Curator*

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