pating in professional development for both marketing and visitor studies can mean attending twice as many conferences and reading twice as many publications.

- Meeting requests for research. With an in-house researcher, the number of studies usually increases (I often do 10 to 12 a year). Other departments ask for help in understanding their particular piece of the audience puzzle as well. Given the sheer volume of work, some studies must still be hired out.

- Contradictory findings. Research on the same project may produce conflicting results. For one special exhibition, a marketing study asked visitors to rate the exhibition as they left the aquarium, while the exhibit evaluation asked them to rate it as soon as they emerged from that particular exhibition. The scales were the same, but the ratings were different. This was challenging to explain.

- Keeping everyone updated. Just getting studies completed can be difficult, much less keeping two departments and the rest of the aquarium updated on the latest findings. However, making sure the information gets utilized is an important part of an in-house audience researcher's job.

...and reaping rewards

Ultimately, the benefits of having a single employee handle audience research for marketing and exhibits far outweigh the difficulties. Among them are

- Reduced costs. When consultant expenses begin to exceed the cost of a full-time employee to do the same work, it makes more sense to move the audience research in-house.

- Collaboration. An in-house person can see more opportunities for collaboration and act on them when they arise.

- Correcting misconceptions. An in-house authority can help correct misconceptions about audiences. For example, when a wayfinding problem prompted floor staff to report that "lots of visitors are completely missing this exhibit," I could cite the marketing exit surveys, which showed that 93 percent of visitors were going to the exhibition.

- Archiving reports and sharing them. Instead of researching with different people around the institution, all marketing and exhibits reports are now archived in one place. I also collect reports from other departments and post reports the aquarium's Intranet for staff to access whenever they want.

- Institutional knowledge. As the point person for marketing and exhibits research, the one person whose job it is to understand and represent the visitor's perspective, I am the one they contact when someone has a question about visitors.

- Cohesive approach to audience research. Fostering a collaborative approach to understanding audiences may be the most important reason to have one person work across two departments. When exhibit evaluations and marketing studies both target a particular audience segment or "hot topic" issue, the data are bound to be richer.

Putting it all together

Figuring out the museum audience is like working on a puzzle. It's a unique puzzle because it takes a lot of teamwork to figure it out. Some of us are good at putting together the border, some are good at seeing the big picture, and some are good at finding that one piece that no one else can find.

At the Monterey Bay Aquarium, marketing and exhibits staff don't always see eye-to-eye, but the two departments have one thing in common: Everyone is there to create the best possible visitor experience. It is really about cultivating a relationship where you feel that you are on the same team. Collaboration and information sharing is improved by having a designated person who is trusted by both departments. Sharing an in-house audience researcher is not a cure-all, but it sure seems to be a good start.

Steven S. Yalowitz is audience research specialist at the Monterey Bay Aquarium, Monterey, California. This article is adapted from a presentation he gave at the American Association of Museums Annual Meeting in May 2004.

Collaborating on Sharks

The case of Sharks: Myth and Mystery, a temporary exhibition currently at the Monterey Bay Aquarium, serves to illustrate how cross-departmental research works. Preliminary studies conducted by the marketing department determined that there were two major audiences we should focus on: families in the San Francisco Bay Area and Hispanics in the Bay Area. In response, the Sharks exhibits team developed an exhibition that had many characteristics appealing to these two groups.

For families there were multiple interactive experiences: a "pop-up" viewing window in a tank, a crafts room, touch experiences, and lower tanks so children could easily view the animals. Hispanic visitors often come in family groups, too, so these elements worked well for both audiences with the addition of bilingual labels in Spanish and English.

Exhibit research contributed to the project's success as well. The front-end evaluation, including photos and information about approaches being considered, was used in marketing focus groups to assess visitor response to the planned exhibition.

Now that Sharks: Myth and Mystery is open, marketing exit survey items provide useful information to exhibits about the project's success, and the summative evaluation being conducted by exhibits includes data of interest to marketing.—Steve Yalowitz

Photo courtesy Monterey Bay Aquarium
What Works for Us:  
Marketing Pointers from the Field

The following tips were contributed by participants in the ASTC RAP, "Marketing the Contemporary Science Center," held last March at the Orlando (Florida) Science Center, and by other science center professionals.

Many brains help films fly
Four to six weeks before we launch a new IMAX film, the marketing department at the Reuben H. Fleet Science Center schedules a promotions session for department managers. Everyone attends, from human resources to education. (Other staff members are welcome to offer input as well.) If we can get a copy of the film, we'll preview it; otherwise, we rely on key art and the theater manager's promo kit.

The meeting begins with some basic brainstorming rules—Say it loud, say it proud! No negativity! Think big!—and a warm-up exercise related to the film. Everyone throws out descriptive words and possible taglines for promotion; these are written down on big flip charts. We discuss VIP party plans, possible cross-promotional partners, and events we could do to promote the film. The session lasts exactly one hour, marketing director Wendy Grant provides free snacks and drinks, and everyone has a good time helping to plan the campaign.—Cindy P Santa Ana, public relations manager, Reuben H. Fleet Science Center, San Diego, California

Caravan of culture
Several years ago, at the South Florida Science Museum, we discovered that Florida's largest art museum, also in West Palm Beach, would be opening its Jewish Life in Ancient Egypt exhibition the same day we were launching our Ancient Egypt: A Celebration of Life. We put together a ticket incentive that gave visitors to one institution a major discount to the other. That was the beginning of a local tourism collabora-

tive that now includes about 30 non-profit organizations.

Our biggest effort so far was the "mini-trade show" we put on last year to promote packaged group tours. We began by deciding on a schedule of tours featuring two or more institutions within a certain area on a certain day. A talented member designed a program brochure we called Cultural Caravan.

Next, we got our local performing arts center to donate a room for an evening event, "A Taste of Palm Beach County," at the beginning of the local season. Invitations went out to hotels, travel agents, airport ambassadors, and group-tour reps from convention and visitors bureaus. Each partner brought a representative food (ours was astronaut ice cream), a table display, and collateral materials. More than 300 attendees took advantage of the opportunity to see what local museums and cultural attractions were offering in 2004-2005.—Elizabeth Dashiell, director, public relations and marketing, South Florida Science Museum, West Palm Beach

Meeting of the minds
People who work at science centers tend to fall roughly into two groups: "hands-on" folks and "big picture" folks. On the hands-on side, you'll find departments like education, focusing on appropriate science subjects for school groups, family visitors, and tourists, and operations, busy handling the logistics on the floor. On the big-picture side are departments like facilities, responsible for safety, cleaning, and maintenance throughout the building, and marketing, looking down the road to find new audiences, connect with potential sponsors, and create promotional materials.

Like most generalizations, this one has its flaws, but it can be useful when considering how to integrate the functions of the museum into a coherent whole. At Science Central, our chief tool for integration is the "Morning Meeting." In this daily gathering, held 15 minutes before our doors open, all departments have a chance to touch on details while reinforcing our primary concern: a successful guest experience.

We begin by running quickly over the schedule for the day: How many guests are expected? How many labs scheduled? How many demonstrations are planned, and on what topics? Next come the spot checks: Is the exhibit floor adequately staffed? Will breaks be covered as needed? Are radios working and supplies ready?

Unspoken, but clearly communicated, is everyone's commitment to the teamwork needed to achieve our goal. As we disperse to our duties, this brief daily encounter reinforces the mission and joy of the institution.—Judy Zehner, director, community relations/marketing, Science Central, Fort Wayne, Indiana

Planning for promise and fulfillment
When the Museum of Science was developing Investigate! A See-for-Yourself Exhibit (a permanent exhibition designed to provide visitors with practice in scientific thinking skills), we conducted focus groups to get a read on possible components. Sessions were held at the museum so participants, after initial discussion about concepts involved, could interact with exhibit prototypes and return to discuss them.

We noticed that when focus group members read about the planned exhibition, they tended to find certain aspects—components in which visitors were to take measurements, collect data, and analyze results—unappealing. But the prototype activities were themselves so user friendly that when people came back from trying them, their views had changed substantially. These results helped us to distinguish between exhibit elements that have
high promise and those that have high fulfillment.

With some activities, as soon as visitors hear a little about them, they immediately want to see or do them. These promise elements are well suited to a marketing campaign. They bring people in. Fulfillment elements may not evoke a similar response, since visitors don’t immediately know what they are, or what they will be like. Still, these components are equally important to the experience because they add significantly to visitors’ satisfaction levels once they get to the exhibit.

This distinction has helped ease the relationship between exhibits and marketing staff as we work on new projects. Developers know that marketers grasp the importance of supporting elements that might not, in themselves, attract visitors to the exhibition. And marketers can count on developers to understand that for an exhibition to be successful, people need to be drawn to it.—Larry Bell, vice president, exhibits, Museum of Science, Boston, Massachusetts.

Finding your niche

At the Museum of Discovery and Science we have learned to mine niche markets to promote films and exhibits and to provide programs that enrich the visitor experience. For each project, we begin by combing the community and the Internet for potential partners willing to share their expertise and/or promotional resources at no cost to the museum.

One recent success was our partnership with the Florida Dive Association (FDA) to promote the IMAX film Coral Reef Adventure. For launch weekend, we worked with FDA to create an on-site, three-day mini-dive trade show, featuring 14 booths and a live broadcast on satellite radio. Additional benefits included access to FDA-member retail outlets and databases; a free booth at a regional dive show; and the well-publicized participation of Jean-Michel Cousteau in our annual shark release.

Horses are popular in our part of the world. For Disney’s film Young Black Stallion, we partnered with the Arabian Horse Association. The group provided educational pieces and sent a discount e-flyer to its local members. Equestrian Lisa Payne brought her Arabian champion Fleet Halaniz to the museum, and the South Florida Trail Riders of Broward County coordinated a horse round-up and mini-trade show.

This summer, in conjunction with the exhibition Prehistoric Park: Return of the Dinosaurs and the IMAX film T-Rex: Back to the Cretaceous, we are running a niche marketing program we call “DinoMania.” Partners include a renowned Florida fossil hunter and the education director of a neighboring zoo, as well as faculty from the University of Miami and Florida International University. We will have seven full days of presentations on such subjects as life in ice-age Florida, the evolution of dinosaurs and birds, and dinosaur extinction.

—Marlene Janeto, vice president, communications and marketing, Museum of Discovery and Science, Fort Lauderdale, Florida

RESOURCES FOR MARKETING

Readings


Web Sites

- American Evaluation Association: www.eval.org
- Informal Science Literature Database: www.informalscience.org/home.html
- Museum Marketing Tips, Tools, and Resources: www.museummarketings tips.com
- Visitor Studies Association: www.visitorstudies.org/
How Far Do They Travel?

Implications of Zip Code Attendance

By Charlie Trautmann

Most museums pay close attention to on-site attendance because (1) it is easy to measure, and (2) it correlates quantitatively with other important aspects of museum operations, such as quality of visitor experience, marketing effectiveness, and financial performance.

Another easily obtained, but sometimes overlooked, assessment that has implications for marketing is Zip code attendance—that is, tracking where visitors are coming from by recording their five-digit U.S. postal codes. This information is relatively easy for sales staff to request and key in as individuals or family groups arrive at the science center and purchase their tickets.

Two years ago, the Sciencenter—a very small museum in Ithaca, New York, with a total annual attendance of 67,000—joined with two other ASTC members in a pilot study to determine what trends, if any, could be identified from looking at visitor Zip codes. Our partners were the Science Museum of Minnesota, St. Paul (large museum, total attendance of 1.3 million), and the Ann Arbor Hands-On Museum, Ann Arbor, Michigan (small museum, total attendance of 210,000). These institutions were chosen not only for their size distribution, but also because they were already collecting Zip code data from visitors.

In the spirit of prototyping, the initial study was “quick and dirty,” designed primarily to determine if additional study might be warranted. We focused on two questions: What percentage of our visitors are traveling short, medium, or long distances to reach us? And how does this percentage change between months with relatively heavy or relatively light tourism? What we found was both predictable and surprising.

Methods

Each museum submitted data for all groups visiting the museum during August and September 2003. These two months were chosen to represent periods of relatively high (summer vacation) and low (post-school-opening) percentages of tourists. The data consisted of the number of visitors in each group and their Zip code. We first determined the distance from the museum to the center of each Zip code area, and then performed exploratory data analysis to look for trends. There were no special factors, such as a blockbuster exhibition or a highly anticipated film opening, to skew the results for any of the three museums.

Results

The figure at the top of this page summarizes the results for the two months at the Ann Arbor Hands-On Museum; these results were similar to those from the other two museums. The vertical axis shows the cumulative percentage of visitors for the month, and the horizontal axis shows the distance from the museum.

In analyzing the data, we noticed two patterns in particular:

- For any given percentage of total attendance, visitors traveled farther during August. This result was anticipated, since it reflects the influence of summer vacation travel and tourism.
- A major fraction of visitors did not travel very far. In August, 80 percent of Ann Arbor visitors came from within a radius of 40 miles or less, and in September, 80 percent of visitors came from within a radius of 30 miles or less. Data from the Science Museum of Minnesota and the Sciencenter showed similar results.

The fact that these radii were so small, especially for the month of August, was not anticipated. I had always assumed that people would travel significantly longer distances during the summer vacation season. As it turned out, even though overall
attendance was higher in the vacation months (at Ann Arbor, September attendance was only 41 percent of August attendance), visitors still came from the various distance bands in roughly the same proportions.

**Implications for marketing**

In an era where attendance is generally flat and marketing budgets are squeezed, this pilot study highlights several patterns that appear worthy of further investigation: How far are visitors willing to travel? How far out should museums extend their advertising? How frequently should exhibits change to keep people coming back? Should museum programs and exhibitions emphasize local, regional, or national messages?

Of course, Zip code statistics cannot capture key factors that influence museum attendance, such as location, curb appeal, and quality and turnover of exhibits. But allowing for those variations, a study of this type could have significant implications for fine-tuning marketing efforts.

In our study, each participant was the primary informal science destination for its population area. The situation might be different for science centers located in large urban centers or major tourism destinations. Because this was a small, unfunded pilot project, the study needs to be extended before definitive conclusions can be drawn.

A next step might be to invite other museums that collect Zip code data to pool their information and perform a more comprehensive study. Further refinements could include (1) a wider variety of museums, (2) data for all 12 months of the year, and (3) population statistics to determine what fraction of its surrounding population a museum is drawing from each distance band.

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**Charlie Trautmann** is executive director of the Sciencenter, Ithaca, New York. Comments and/or suggestions for further investigation can be sent to him at cht2@cornell.edu.

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**Calendar**

**THROUGHOUT 2005**


**JULY**


**AUGUST**


11 ASTC RAP Session.* “Physics—The Most Simplistic of the Sciences.” Hosted by Utah Science Center, Salt Lake City, Utah, immediately following the annual meeting of the American Association of Physics Teachers. Details: Joe Andrade, joearadra@uofu.net

**SEPTEMBER**

12 Math Momentum Workshop: Algebra. Hosted by the Oregon Museum of Science and Industry (OMSI), Portland, Oregon. Details: Sandy Baril, sbaril@omsi.org; 503/797-4560


26- Theatre in Museums Workshop. Science Museum of Minnesota, St. Paul. Part I (Sept. 26-28) open to all; Part II (Sept. 29-Oct. 1) requires previous participation. Details: Tessa Bridal, tbridal@smm.org

**OCTOBER**


**NOVEMBER**

3-5 Museum Computer Network Conference. Boston, Massachusetts. Details: www.mcn.edu/

7 Math Momentum Workshop: Data and Measurement. Hosted by the Science Museum of Minnesota, St. Paul. Details: Majaa Sedzieleb, majaa@smm.org, 651/221-4554

**FEBRUARY 2006**


25- National Engineering Mar. 5 Week (Canada). Details: www.engineeringweek.on.ca

**MAY 2006**


**JUNE 2006**

8-10 Ecsite Annual Conference. Hosted by Technopolis, the Flemish Science Centre, Mechelen, Belgium. Details: www.technopolis.be

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* Information on ASTC RAP sessions is available at www.astc.org/profdev/. For updated events listings, click on Calendar at www.astc.org.
relationships in helping our youth to become lifelong learners and productive citizens for tomorrow.

Also on Saturday, Juanita Brown, dialogue consultant and co-author of The World Café: Shaping Our Futures Through Conversations That Matter, will guide attendees in ASTC’s first large-scale World Café. This roundtable of intimate conversations will address hot topics and current and future trends in the science center field. As a consultant, Brown has helped senior corporate and nonprofit leaders around the world to foster knowledge-based organizations and develop large-scale change initiatives. (For more on the World Café concept, visit www.worldcafe.com.)

Virginia means variety
Of course, there’s more to the ASTC Annual Conference than speakers, panels, and workshops. Our 2005 host, the Science Museum of Virginia, has put together an exciting program of tours and events to supplement this year’s formal sessions.

For those arriving early, tours on Friday, October 14, include a daylong trip to the Virginia Beach and Hampton Roads areas to visit the Virginia Aquarium & Marine Center (with an optional dolphin-watching cruise) and the Virginia Living Museum; a morning tour of Richmond’s Virginia BioTechnology Research Park, home to more than 45 biosciences companies; and a fast-paced afternoon of white-water rafting on the city’s Class II to Class IV James River rapids.

Postconference tours are equally enticing. On Tuesday, October 18, attendees can choose from a quarry fossil dig led by the Virginia Museum of Natural History; an outing to the homes of two U.S. presidents, James Monroe’s Ashlawn-Highland and Thomas Jefferson’s Monticello; and a daylong tour of Norfolk, Virginia, complete with a river cruise and a visit to Nauticus, the National Maritime Center. A special overnight tour

Philip Morrison: An Appreciation

By George E. Hein and Michael Spock

Phil Morrison, 89, distinguished American astrophysicist and educator, died at his home in Cambridge, Massachusetts, on April 22. Two friends offer this tribute to the MIT Institute professor emeritus, a longtime supporter of science centers.

Beyond his more public roles at MIT and the Manhattan Project, Philip Morrison will be missed as a passionate advocate for the public understanding of science. With his late wife and collaborator, Phylis Singer Morrison, Phil helped lift the veil of how science is actually done and found ways to give everyone—whether comfortable with science or not—a taste of learning real science by doing real science.

Together, the Morrisons made significant contributions to post-World War II development of materials-based, inquiry-oriented science curricula and to the establishment of modern science centers and interactive exhbity. They helped to renew and maintain the theory and practice of progressive education, and, through their insightful Scientific American book reviews, encouraged the rise of a popular science literature for children and adults.

A close friend of Frank Oppenheimer, founder of the Exploratorium, Phil was one of that museum’s most devoted supporters from the start. During frequent residencies in San Francisco, he and Phylis worked with other scientists, artists, and staff to conceive, develop, and evaluate several memorable exhibits. Phylis also worked on exhibits at the Children’s Museum, Boston.

Philip Morrison was one of a number of scientist/educators who made common cause with John Dewey’s idea that learning was doing. He believed that science must be seen from earliest childhood as a process to be practiced, not a product to be memorized. In that spirit, he served as chair of the Steering Committee of the Elementary Science Study (ESS), a curriculum development project of the Education Development Center in Newton, Massachusetts. His essay, “The Curriculum Triangle and Its Style,” published in The ESS Reader (EDC, 1970), still provides an elegant and relevant argument for materials-based, problem-solving, elementary school science.

Thanks to the insight and clarity of Philip Morrison, curriculum projects like ESS and the first science centers and children’s museums worked in parallel to help develop the approach to informal, problem-based learning that is the foundation of today’s informal science education. He will be missed by all of us in the field.

George E. Hein, a former ESS staff member and museologist, is professor emeritus at Lesley University, Cambridge, Massachusetts. Michael Spock, former director of the Boston Children’s Museum and head of public programs at the Field Museum, is a research fellow at the University of Chicago and scholar in residence at the Chicago Historical Society.
on Tuesday and Wednesday will immerse attendees in the first 100 years of Virginia history, with visits to Colonial Williamsburg, Jamestown, and Yorktown.

Dinner events on Friday and Monday offer a range of experiences, from Shockoe Bottom nightlife, featuring the adventurous Richmond Triangle Players, to the gardens and lakes of the Lewis Ginter Botanical Garden and the historic atmosphere of Agecroft Hall, a Tudor-era British estate house transplanted to the banks of the James. New this year are several daytime activities designed especially for guests and spouses of conference delegates.

Early-bird registration open
Preliminary programs for ASTC 2005 were mailed to previous attendees in late June. Information is also available on the ASTC web site at [www.astc.org/conference](http://www.astc.org/conference). A downloadable registration form can also be found there. For the first time, an interactive feature on the site this year will allow users to select and print out a personal schedule of conference sessions and workshops.

Early-bird registration costs $475 for employees of ASTC members and $575 for nonmembers—a $75 savings over the full registration price. The deadline to receive the discount is August 12.

When you fill out your registration form, don’t forget to mark a menu preference for Saturday’s free Exhibit Hall box lunch—a new benefit this year—and indicate your top three choices for any space-limited sessions.

Best on the Web
At the annual Museums and the Web conference, held in April in Vancouver, British Columbia, ASTC’s redesigned web site, [www.astc.org](http://www.astc.org), was honored by an independent panel of judges as Best Museum Professional’s Site for 2005. Among their comments: “ASTC consistently provides excellent information and resources ...in an easy-to-use and visually appealing manner.” “With the addition of online workshops, ASTC shows itself to be responsive to the field and willing to be innovative.”

This was the second time ASTC had won the same award; our previous web site got the nod in 2001.

Also honored at Museums and the Web, for both Best Educational Use and Best Overall Museum Web Site, was “Making the Modern World Online: Stories about the Lives We’ve Made” ([www.makingthemonmodernworld.org.uk](http://www.makingthemonmodernworld.org.uk)), created by London’s Science Museum, an ASTC member. Judges called the site “a robust demonstration of how museum artifacts can be offered online to engage audiences.” One added, “I was fascinated and could have stayed for hours just poking around.”

ASTC to Manage Math Exhibition
Developed by the Museum of Life and Science, Durham, North Carolina, *Flip It, Fold It, Figure It Out!* features engaging activities with shapes, sizes, and patterns that entice visitors to “play with math.” The 1,500-square-foot traveling exhibition, which opens in Durham this August, begins its ASTC-managed tour next February.

*Flip It, Fold It, Figure It Out!* comprises seven clusters of related components. Visitors can tile shapes into pleasing patterns, fold an origami model, and compare how much different containers will hold—all while exercising skills in measurement, arithmetic, and geometry. Activities are aligned with standards set by the National Council of Teachers of Mathematics. Project funding was provided by the National Science Foundation as part of its priority on enhancing mathematics learning.

For more information, visit [www.astc.org/exhibitions](http://www.astc.org/exhibitions), or contact Exhibitions Services manager Wendy Hancock at 202/783-7200 x117.

Welcome to ASTC
The following new members were approved by ASTC’s Membership Committee in September 2004. Contact information is available in the Members section of the ASTC web site, [www.astc.org](http://www.astc.org).

**SCIENCE CENTER AND MUSEUM MEMBERS**

- Alabama Wildlife Federation, Millbrook, Alabama. With its new Nature Center expected to open in 2006, the federation is currently conducting outreach programs that train elementary school teachers and administrators how to incorporate conservation education into their classrooms.

- Grant County Science Center, Gas City, Indiana. Now in the early planning stages, this science center will be housed in the county’s Memorial Coliseum.

- Haffenreffer Museum of Anthropology, Bristol, Rhode Island. This 50-year-old collections-based archaeology and anthropology museum at Brown University offers on-site experiential programs for school groups, as well as van-based outreach.

- Morehead Planetarium and Science Center, Chapel Hill, North Carolina. Opened in 1949 on the campus of the University of North Carolina, the planetarium and science center is presently undergoing a $10 million renovation.

SUSTAINING MEMBERS

- CUREE (Consortium of Universities for Research in Earthquake Engineering), Richmond, California
- Premier Exhibitions, Atlanta, Georgia
- Sky-Skan, Inc., Nashua, New Hampshire
RAIN TODAY?—How much does weather affect watershed health? Be a Watershed Weather Reporter, a permanent exhibition developed by ECHO at the Leahy Center for Lake Champlain, Burlington, Vermont, in partnership with local WPTZ NewsChannel 5, invites visitors to not only learn, but also broadcast the answer to this question in a simulated TV weather report.

Upon entering the exhibition’s “green screen” studio, visitors choose one of six weather stories: Flood, Drought, Snowstorm, Lightning Storm, Today’s Weather, or Weather Watchers (a story designed for younger learners). Each story has a teleprompter script that includes information not only on specific weather events, but also on how those events affect the quality of the water we drink and the air we breathe. Young broadcasters can encourage viewers to make water- and earth-friendly choices, such as using less salt during a snowstorm.

After recording their watershed reports, visitors create a complete Basin Broadcast, adding an introduction by the NewsChannel 5 chief meteorologist to their weather forecasts, as well as a public service announcement, such as “Eco Cool School.” The broadcasts are available for purchase on DVD. And to encourage visitors to go to the ECHO website for more on watershed stewardship, images of visitor “weather reports” are inserted into e-cards that can be accessed by password.

Major funding for the $190,000 exhibition was provided by the U.S. Environmental Protection Agency.

New England. In-kind support was contributed by NewsChannel 5, the Lake Champlain Basin Program, and the U.S. Geological Survey.

Details: Steven Leibman, marketing manager, sleibman@echovermont.org

BACKYARD BONES—Lone Star Dinosaurs, a new permanent exhibition at the Fort Worth Museum of Science and History, shows visitors that great discoveries can be made close to home. Opened on May 28 at the Fort Worth, Texas, museum, the 8,000-square-foot exhibition showcases five new species of dinosaurs unearthed in Texas during the last 20 years and invites visitors to play the role of paleontologists and immerse themselves in the process of scientific discovery.

Exploration begins at the Field Site, museum’s web site. Finally, Texas Road Trip introduces visitors to five dinosaur species of the Cretaceous period discovered near Fort Worth since 1982. Here, visitors will find two complete dinosaur skeletons, one of which was discovered by a 7-year-old boy and his father.

Lone Star Dinosaurs was supported by a $1.38 million grant from the National Science Foundation and $2 million in private donations. The museum will also produce satellite exhibitions and educator kits for other Texas educational facilities. Together, the Lone Star Dinosaurs exhibitions and educational programs are expected to reach at least 1.5 million people per year, including many living in rural Texas communities.

Details: Margaret C. Ritsch, director of public affairs, mritsch@fwmsh.org

MAKING CONNECTIONS—Under the tagline “Discover the scientist in you,” visitors to New York’s Buffalo Museum of Science will find an innovative new experience platform from which to link nature, technology, and art. A 4,600-square-foot exhibit gallery at the museum has been transformed into Connections, a highly visual, flexible learning environment where explorers can choose items from the museum’s extensive collections for in-depth study or research a science topic of interest.

Opened in April after months of testing with groups of students, teachers, and adults, Connections is the first product to emerge from two years of intensive strategic planning at the 143-year-old institution. Museum president and CEO David Chesbrough calls it “a window into the future Buffalo Museum of Science.”

The gallery introduces the concept of “Science Studios” and allows the museum to test assumptions about relevant and appealing ways to combine collections access, self-directed learning, best practices from the for-profit world, and interactive technology. It also allows testing of such new strategies as upcharges to regular admission and customized curricula to
supplement classroom work and educator training.

As a facilitated space, Connections is adaptable to a variety of programs for individuals or groups. Six computer-equipped stations contain both high and low-tech tools. For example, at the same station a visitor could use a high-powered Scope-on-a-Rope to look at African fabrics or a fossil, and then compare those same items using a 19th-century microscope. The gallery also features an oversized stream table, live plant and animal specimens, a rotating array of artifacts displayed in drawers and cases, and a flexible-use orientation space.

Funding for the gallery was provided by the Buffalo-based John R. Oishei and West Ferry foundations.

Details: Mike Lazzaro, communications manager, mlazzaro@science-buff.org

MEET ME AT THE FAIR—For decades, World’s Fairs brought visions of the future to their visitors, showcasing state-of-the-art technologies, new consumer products, architecture, art, and music. **Centuries of Progress: American World Fairs, 1853 to 1982**, a new temporary exhibition at the Hagley Museum and Library, Wilmington, Delaware, allows visitors to step back in time to when today’s familiar sights and sounds were part of an exciting new wave of the future.

The 2,000-square-foot exhibition is presented in six sections:

- Progress as a Way of Life introduces international expositions and their focus on technological, cultural, and political advances.
- Marketplace of Ideas demonstrates the role of the fairs as showcases for new technologies. A slideshow features the new color advertisement trading cards first distributed at the 1876 fair.
- Consumerism showcases everyday products, from sewing machines to Dr. Pepper, that debuted at World’s Fairs. A highlight here is a 1960s video of “dancing molecules,” dressed in go-go boots, extolling the virtues of plastics.
- Art, Architecture, and Music documents contributions to the fine arts. Audio wands allow visitors to hear songs that John Phillip Sousa and Scott Joplin composed for World’s Fairs.
- Popular Amusements covers entertainment introduced at fairs, including a working model of the 1964–65 U.S. Rubber Company “Tire” Ferris Wheel exhibit.
- Remembering the Fair focuses on postcards, viewmasters, and other souvenirs sold at the fairs. As visitors leave the exhibition, they are encouraged to record their own World’s Fair experiences in a binder for preservation in the museum’s archives.

Topical programming, including a symposium, lecture series, and book club, is planned for the exhibition’s 16-month run. Funding for the $50,000 project was provided by corporate and private individual donations.

Details: Suzy Rogers, marketing manager, srogers@hagley.org

**At the Centuries of Progress exhibition, visitors view World’s Fair souvenirs images through a stereopticon and its modern successor, the Viewmaster. Photo courtesy Hagley Museum and Library**

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**Grants & Awards**

TELUS, the largest telecommunications company in western Canada, has undertaken two new partnership agreements with Canadian science centers. In a 15-year, $10.1 million (Canadian) partnership with the Ontario Science Centre (OSC), Toronto, TELUS will help to support the museum’s Agents of Change initiative, including creation of a 34,000-square-foot outdoor exploration plaza that will bear the company’s name. The partnership will also provide support for OSC’s school programs. And in a 20-year, $8.2 million sponsorship agreement with the Edmonton Space & Science Foundation, TELUS will support the enhancement and expansion of exhibits and programming at Odysseum, Edmonton, Alberta. Under the terms of the agreement, the science center will be renamed TELUS World of Science.

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The U.S. Department of Education and the Florida Hydrogen Initiative have awarded grants of $99,200 and $199,500, respectively, to fund public education efforts related to hydrogen energy at the Orlando Science Center, Orlando, Florida. The money will support development of educational programming and an interactive traveling exhibition.

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The Dallas Museum of Natural History Association has received three major gifts toward its $150 million capital campaign for a new Museum of Nature & Science. Donors include the Hoglund Foundation ($8 million), Corrigan Investments Inc. ($2 million), and Nancy B. Hamon ($1 million). Earlier, the museum association received a $10 million gift from Hunt Petroleum.

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The Hearst Foundation has awarded $100,000 to the Museum of Science, Boston, Massachusetts, to augment an endowment for school-outreach programs.
The board of directors of Ohio’s COSI Toledo announces the resignation of founding president Bill Booth, effective August 11. After 12 years at the museum, Bill is leaving to pursue new avenues in teaching and learning. In addition to his duties in Toledo, Booth has been a leader in ASTC, heading the association’s Membership Committee since 1996 and serving on the board of directors from 2001 to 2005. COSI expects to begin a national search for a new director in late summer. In the meantime, Jim Mihaly, principal with the ACT Group Ltd., is serving as interim chief operating officer, and Lori Hauser, previously director of marketing, is the new general manager.

The Fort Worth Museum of Science and History, Fort Worth, Texas, has appointed Carl G. Hamm, CFRE, as its new executive director of fund development. Hamm was most recently associate director of development at the Dallas Museum of Art. In Fort Worth he will establish and lead major campaigns to support the broad programmatic needs of the museum.

Goéry Delacôte, for 15 years executive director of the Exploratorium, San Francisco, California, has resigned his position, effective in September 2005. Expressing a desire to be closer to family in Europe, Delacôte will assume the leadership of At-Bristol, in Bristol, U.K., replacing John Durant, newly appointed director of the MIT Museum, Cambridge, Massachusetts (see People, ASTC Dimensions, May/June 2005). A noted French scientist, educator, and public servant, Delacôte saw the Exploratorium grow under his watch from a budget of $7 million a year to $28 million and established an international network of partner museums serving more than 7 million visitors annually. A search is now under way for his successor.

We are saddened to report that Dave Taylor, who worked for 25 years at the Pacific Science Center, Seattle, Washington, much of that time as director of exhibits, died of liver failure on May 8. He was 52. Taylor had left the museum several years ago to pursue a doctorate in informal science learning at the University of Washington. His article “Social Science: Observing Women and Girls in the Museum” appeared in the May/June 2005 issue of ASTC Dimensions. He was a frequent contributor to the ISEN-ASTC-L list, and he made available on his web site, www.aloha-museumservices.com, an extensive archive of science center photos. That resource will now be maintained by the Pacific Science Center. A memorial service for Dave Taylor was held at the science center on June 20, the night of the summer solstice. Donations may be made in his name to the Pacific Science Center or to the United Way.