

Tracks

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News from The Cleveland Museum of Natural History



July/August 2009

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Seth Chwast

03-12-2009

Keeping Track with the Director

The Museum is a great place to spend part of your summer. Whether exploring our galleries and exhibits or enjoying a fun activity with your child in our Smead Discovery Center, there's something for everyone.

But beyond the displays our visitors see and the boisterous groups of children that swarm our classrooms and galleries during the busy summer camp season, there's much more going on outside our Museum walls. Summer is a vital time for our curatorial staff.

Our curators spend much of their summers out in the field collecting specimens and conducting research. Whether done in our labs, throughout Northeast Ohio's natural preserves, rivers and streams, or across the globe in the far reaches of the desert, research is key to the Museum's mission. As a world-class research institution, our accomplished curators are renowned in their respective scientific fields. They also invest time

during their summers to teach and mentor college students in our Adopt-A-Student program to encourage their interest in science and help prepare this next generation of scientists.

So while our curator of Vertebrate Paleontology treks across the Gobi Desert this summer searching for Kirtland Hall's next dinosaur, our curator of Physical Anthropology will be working in a laboratory in Ethiopia preparing fossils of hominid specimens collected during his 2009 field season. In addition, our curator of Archaeology will lead an excavation of a prehistoric Native American settlement near Milan, Ohio. These are just a few examples of the important research our curators will be doing over the next couple of months.

Closer to home, here at the Museum, there are many opportunities for you to dig into science, uncover history or explore what's beyond our planet. Our planetarium shows take you on a celestial journey to

discover the wonders of the night sky. We also offer live animal programs that help children get to know the wildlife they may encounter in their own neighborhood.

Bring your out-of-town guests and visiting family this summer. Spend a rainy day inside our Museum or escape the outdoor heat inside our halls of learning. Get closer to nature and experience an adventure in your own backyard by participating in one of our many field trips or Natural Areas wine tours.

The options for exploration and discovery are endless. Our devoted staff and volunteers work hard to ensure your family's Museum visit or outdoor journey will be a special memory to add to the summer scrapbook. And maybe during a future visit, you'll get to discover specimens procured from the research our curators are currently conducting.

Bonnie Cummings

Bonnie Cummings
Interim Executive Director
Chief Operating Officer

Darwin's influence

New Museum exhibition combines works of local artist and historical objects

Art and history merge in *Visions of Galapagos*, the Museum-produced exhibition that opens July 18 in Fawick Gallery. Visitors can experience vibrant artwork while viewing original works by groundbreaking naturalist Charles Darwin.

Blending artistic creativity and scientific theory, the exhibit offers visitors a unique way to explore the connection between Darwin and nature. The exhibit features 32 of Cleveland Heights artist Seth Chwast's colorful, contemporary paintings and sculptures that bring to life the avian and aquatic creatures that inhabit the Galapagos Islands. Darwin's observations of plants and animals that

inhabit these small tropical islands were instrumental to the development of his theory of evolution by natural selection.

The exhibit also showcases rare, first-edition texts authored by Darwin. These items, on loan from the Dittrick Medical History Center at Case Western Reserve University, include copies of *On the Origin of Species*; *The Zoology of the Voyage of H.M.S. Beagle, under the Command of Captain Fitzroy, R.N., during the Years 1832 to 1836*; and "Voyage of the Beagle," which is the third volume of Fitzroy's *Narrative of the Surveying Voyages of His Majesty's Ships Adventure and Beagle, between the Years 1826 and 1836*.

Specimens from the Museum's collections round out the exhibit and demonstrate Darwin's theory of evolution. A Frigate, Swainson's Hawk and Green Iguana connect the animals depicted in Chwast's artwork to natural history concepts.

In addition, a touch-screen interactive allows visitors to learn about the geography, ecology, natural history and evolutionary significance of the Galapagos. Children can participate in a hands-on activity where they can build a bird by using different adaptations, such as beaks, feet and other anatomical variations.

Visions of Galapagos will be on display through October 11.

About the artist

Diagnosed with autism as a young child, Chwast rarely speaks. In 2003 at the age of 20, he took an oil painting class at the Cleveland Museum of Art. This introduction to art led Chwast to begin using paint to describe his world.

After he started painting, the Chwast home filled with art. In March 2007, he began to travel. A visit to Costa Rica inspired him to infuse his work with the colors of the tropics.

The artist traveled to the Galapagos Islands in November 2007, where his first international exhibit opened in March 2008. During his second trip to the islands, he met with the director of the Charles Darwin Foundation, who invited him to create art for the organization.

Chwast continues to communicate through art and exhibits his work both around the world and locally. To view Chwast's art, visit www.sethchwastart.com.



Honoring Museum volunteers

On May 19, the many dedicated volunteers who donate their time and talents to the Museum were recognized during the annual Volunteer Appreciation Night. Museum leadership and staff are grateful for their valuable contributions, which help the institution carry out its mission.

In addition to the service awards, Kaloyan Ivanov received the Museum's Student Award for 2009. Ivanov has worked with Dr. Joe Keiper, Curator of Invertebrate Zoology and Director of Science, since 2005. Ivanov attends Cleveland State University and will obtain his doctorate degree this year.

The following volunteers were recognized for their service.

5,000 Hours of Service

Dale J. Zelinski, Vertebrate Paleontology

2,500 Hours of Service

James Bowers, Archaeology
Diane H. Lucas, Botany
Terrance George Martin, Vertebrate Paleontology
Evelyn Newell, Archives

1,000 Hours of Service

Leila Shizawa, Mineralogy

500 Hours of Service

Rita Atlagovich, Education
H. Thomas Bartlett, Natural Areas & Ornithology
Jaimee Bowers, Archaeology & Education
Hans Clebsch, Invertebrate Zoology
Anne Cook, Mineralogy
Pamela W. Gibbon, Archaeology
Philip Kleinhenz, Archaeology
William D. MacDermott, Business Office & Museum Store
Richard J. Marshall, Wildlife Resource Center
Barbara Nahra, Education
Deborah O'Malley, Museum Store
Alan J. Weiss, Paleobotany
Peter Pesch, Ornithology & Wildlife Resource Center

150 Hours of Service

Merritt T. Birney, Marketing & Communications
Ronald Brant, Business Office & Special Events
Carrie Buchanan, Marketing & Communications
Linda Cepek, Education
Lisa Chapman, Ornithology
Emily Dennis, Invertebrate Paleontology
Rita Elswick, Archaeology
Vickie Ford, Astronomy & Education
Edward Fritz, Astronomy, Mineralogy, Physical Anthropology & Science Resource Center
Dan Galdun, Astronomy
Gita Gidwani, Education
George A. Gilliam, Archaeology
Laura Gooch, Ornithology
Susan E. Jones, Ornithology
Nicole Karn, Marketing & Communications
Harry Lee, Natural Areas
Robert Marek, Invertebrate Zoology
Kathleen Meaney, Museum Store
Gary M. Neuman, Ornithology
Donna M. Pesch, Ornithology
Daniel E. Pugh, Archaeology
Larry Rosche, Botany & Natural Areas
Andrew Rossi, Education
Karin Tanquist, Ornithology
Linda Tobin, Education
Julia West, Ornithology
Gilbert Jay Winer, Archaeology
Alexandra Ward, Marketing & Communications
William G. Ward, Invertebrate Zoology

Thank you

Exploring evolution

The exhibition *Surviving: The Body of Evidence* reveals the science of evolution.

To find clues into the process of evolution, we can take a look at our own bodies. Humans are survivors. An innovative exhibition on display at the Museum illustrates how we have adapted and evolved over time.

Developed by the University of Pennsylvania's Museum of Archaeology and Anthropology and funded by the National Science Foundation, *Surviving: The Body of Evidence* takes you on a journey of self discovery. Along the way, you can investigate the scientific evidence supporting the theory of evolution.

Explore six multimedia sections throughout the exhibit as you search for signs of adaptation and consider the impact of the evolutionary process on the human species. Examine more than 100 casts of primate and human fossils and see the stages of evolution over time.

A dramatic audio component allows you to hear the breakthrough theories of seven famous scientists in their own words. Then, after touring the exhibition, you can share your own predictions about our evolutionary future.



Surviving: The Body of Evidence will be on display in Kahn Hall through August 30.

Eco-Minded: ideas for living sustainably

Saving energy in summer

We often focus on ways to save energy in the winter, hoping to reduce heating bills. But you can save money and help reduce global warming by conserving energy in summer as well. Here are a few ideas, most of which come from David Beach, Director of the GreenCityBlueLake Institute at the Museum.

- Walk and bike wherever you can and leave your car at home. In Cleveland, cycling is possible most months of the year with appropriate clothing.
- Grow a vegetable garden and/or get local produce from farmers' markets or ordering directly from farmers. This cuts down on transportation costs, and the food tastes better because it's fresher.
- Close windows and drapes during the hot hours of the day. Open them in the evening and at night.
- Sit on the porch or in your backyard and enjoy a cool evening breeze instead of turning on the air conditioning.
- Plant deciduous trees south and west of your house to shade it during the hot

summer. In winter, when the leaves are gone, the house will be warmed by the sun.

- Keep the refrigerator door closed as much as possible. Don't stand in front of the fridge contemplating what to eat.
- Keep the refrigerator's coils clean and free of dust to improve its efficiency — these can be at the back or underneath the refrigerator, depending on the model. If they're at the bottom and hard to reach, use the vacuum cleaner attachment for tight spaces.
- Think carefully before using air conditioning. "In some rooms, a simple ceiling fan can give you enough comfort," says Beach.
- If you have an older window air conditioner, consider buying a new one with an Energy Star symbol. The most efficient new air conditioners are as much as 50 percent more efficient than older models.
- If you must use central air conditioning, for example to alleviate allergies, set the thermostat temperature as high as you can tolerate.

- Using ceiling fans in combination with air conditioning can allow you to set the temperature about 4° F higher without reducing comfort, according to the Department of Energy.
- A window air conditioner in a shaded location uses about 10 percent less energy than it would use in the sun.
- Insulation serves a dual purpose: it keeps heat in, in winter, but it can also keep it out of a cool room in summer.
- Insulation in the attic is particularly helpful because that's the part of the house that gets hottest. However, see the next tip for more on attics.
- Attics need an exhaust system to remove heat buildup. Older roofs often don't have ventilation. When you get your roof replaced, install a ridge vent or other types of outlets to let summer heat escape.

For more on summer energy efficiency, visit the U.S. Department of Energy's Web site at www.energy.gov/summer.htm.

Sustainable solutions

Discovery Center efforts to reduce waste

The Smead Discovery Center, the Museum's hands-on learning center, has long faced a dilemma about what to do with broken or worn out toys, equipment and furniture. The alternatives of throwing these items in the garbage (trashing) or saving them for use in the future (stashing) are not exactly sustainable.

After identifying this as a problem that visitors also face, the Discovery Center staff, with the help of a student volunteer, decided to commit to a goal of creating less waste.

According to the Environmental Protection Agency, the average human throws away roughly 4.4 pounds of trash each day. Now consider how slowly trash breaks down. By creating sustainable solutions for household items, less goes into landfills, fewer fossil fuels are burned to get the trash to those landfills, and there will be less

trash to deal with in the future since little of it decomposes rapidly.

With this in mind, the Discovery Center staff set to work. For the past year, the staff's mission has been to "trash or stash no more." This goal, combined with a lot of ingenuity, has allowed the Center to successfully keep 600 pounds of trash out of a landfill, save \$3,000 and partner with three local and regional groups to spread the word about sustainability.

The Center has recycled 137 pounds of paper, some of which became papier-mâché toys for the Museum's live animals; made its own crayons by recycling old crayon bits; rescued 213 pounds of old letterhead and other paper for use in crafts; composted 70 pounds of coffee grounds, animal food and lunch waste; donated 20 pounds of gently worn toys and crafts to a local Head Start program; and more. In addition, staff collected 30 pounds of broken plastic toys from

visitors and donated them to Happen Inc. of Cincinnati. The company operates a Toy Lab where children can use their imaginations to turn broken toy parts into zany new toys.

The Discovery Center staff created a program to share their creative and practical ideas with visitors. In addition, their mini guide, "Sustainable Alternatives to Trashing and Stashing Hard-to-Recycle Playthings," is available in the Center. It was printed on "pre-cycled" paper, or unused pages that would have otherwise been discarded by the Museum.

The goal of reducing waste drives the Center's daily activities. It shapes how the staff deals with the broken toy parts and worn equipment it inevitably encounters. The team has proven that with dedication, much effort and a lot of creativity, sustainable solutions are within reach.

sustainable saturdays

Be part of the climate change solution. Join staff from the Museum's GreenCityBlueLake Institute in the Museum Store on the second Saturday of each month for information-packed discussions to discover what a healthy quality of life entails. Learn, share, peruse our book selection and enter our raffle. Stop in at any time between 1 and 4 pm to participate. Help kick off the program on July 11 with WATER! Then, get engaged with ENERGY! on August 8.

**museum
STORE**

Hours: Monday through Saturday, 10 am to 5 pm; Wednesday, 10 am to 8:30 pm; and Sunday, noon to 5 pm. Or shop online anytime at www.cmnh.org.



Museum's 'adopted' students praise program's lifelong benefits

Adopt-A-Student program celebrates 30th anniversary



In the office of Dr. Christopher Adams at Thomas Jefferson University Medical College is a picture of the Physical Anthropology laboratory at The Cleveland Museum of Natural History, its tables filled with row upon row of human skulls. Standing in front of the skulls are Adams, then a college student, and his supervisor at the time, Dr. Bruce Latimer, who then headed the Physical Anthropology lab (and in later years, the entire Museum).

It's a 23-year-old photograph, and the fact that it still hangs in Adams' office in Philadelphia is testament to the value of his experience in the Museum's Donald S. Dean Adopt-A-Student program, now celebrating its 30th year. The program, which has brought 242 students into the Museum over the past three decades to do research alongside the scientists who work here, will hold an anniversary celebration on Saturday, August 8.

"It was really an excellent opportunity for me to get my foot in the door as far as seeing what science was about," said Adams, whose career in orthopedics research has taken him to the medical college at Thomas Jefferson University in Philadelphia and resulted in more than 50 publications in the past 10 years.

During his Adopt-A-Student summer in 1986, Adams worked extensively with Latimer and the Museum's Hamann-Todd collection, the world's largest scientifically documented modern collection of human skeletons.

"I found that I enjoyed it quite a bit," said Adams. "I have nothing but good memories."

During that summer, Adams was called upon to make his first-ever presentation, using slides he had prepared himself of the Hamann-Todd collection. This is a skill most students don't learn until graduate school. But this work was so original, he now realizes he could have had his research published.

"Every once in a while I'll pull out one of the slides and use it to illustrate a particular fracture," he said.

As a result of his summer experience, Adams said, "I went to grad school to study physical anthropology at Kent State" with Dr. Owen Lovejoy. He later moved into cell biology and then medical research. Now, he says, he has come full circle as he prepares to teach anatomy, starting in the fall, at the Philadelphia College of Osteopathic Medicine. He still loves the subject.

Fellow Adopt-A-Student Dr. Lisa Ellyn Park, a 1987 participant, is now

a full professor at The University of Akron in geology and environmental science. "I just think it's a wonderful program. It was so helpful to all of us, then, to see what happens in a museum setting.

"I'm very happy the Museum has been able to keep the program going as long as they have."

During her Adopt-A-Student summer, Park worked with Dr. Joe Hannibal in Invertebrate Paleontology.

"It was an amazing summer. We went out and did fieldwork on the Chagrin River" with a particular focus on the Chagrin Shale, she recalled. They also compiled a bibliography about stone used for buildings, monuments and works of art, a subject in which she retains a keen interest. Her first publication, coauthored with Hannibal in 1992, arose from their building stone work.

Park spent a second summer at the Museum as a regular employee, working with Dr. Sonja Teraguchi, who then headed Invertebrate Zoology, in Mentor Marsh where she tracked gypsy moths, built a butterfly walk and took various measurements. As a professor, she has had several graduate students, and now one undergraduate, use Mentor Marsh for their research—just one of a number of ways she continues to work collaboratively with the Museum.

Park said the Adopt-A-Student program was her first real exposure to the world of scientific research, and one which set her on course for an amazing voyage of discovery. Her own research concerns *Ostracoda*, a class of crustaceans "kind of like shrimp in a shell," she said. She uses them to study paleo-environmental change through time. She did most of her doctoral research in Africa and says, "I've gone more or less around the world doing this research."

She has also received over \$1

million in external National Science Foundation funding as principal investigator and participated in research worth double that amount; she has also published more than 30 papers, three books, and mentored 10 graduate and 24 undergraduate students.

Another former Adopt-A-Student is Dr. Larry Ross, now an associate professor of sociology and anthropology at Lincoln University in Jefferson City, Missouri. During the summer of 1992 he worked with Esther Bockhoff, former curator of Cultural Anthropology.

"It was a special relationship that we had. She helped me with my statement of purpose when I was later going to grad school." He has returned on occasion to visit the Museum, and hopes to attend the Adopt-A-Student program's planned anniversary celebration in August.

Ross spent his summer moving artifacts into new storage facilities built specifically for the Cultural Anthropology Department. All had to be carefully classified and prepared. "It was very scientific," he said. While doing this work, Ross also met a Museum staff member who sparked his abiding interest in Mayan culture. It is a field he has come to know well, including learning to speak one of the 30 ancient Mayan languages.

Other areas of expertise are jazz music and Egyptology. A violinist from an early age, Ross played in orchestras, including the All-City Orchestra in Cleveland, while growing up here in the 1960s. He wrote his doctoral dissertation about the culture of jazz musicians, and in 2003 it became a book, *African American Jazz Musicians in the Diaspora*. Most recently, he authored another book: *Nubia & Egypt: From Prehistory to the Meroitic Period*.

The Museum experience had a profound influence on his career, Ross said. "There is no better research opportunity for an undergraduate. You get to work with people with great qualifications at a facility with so many assets. It's tremendous."

For Elizabeth ("Biz") Turnell, the Adopt-A-Student experience was quite recent, but it has already had an impact. "It definitely solidified my interest in scientific research and then ecology and evolution," she said. "It also solidified my interest in insects."

Turnell was in the program in 2002 while a biology major at Yale University specializing in ecology and evolutionary biology. Her internship, which she spent working with Dr. Joe Keiper in Invertebrate Zoology, "fed back" into her

studies very well, she said.

Turnell is now a graduate student at Cornell University, working toward a doctorate in neurobiology and behavior. She is studying a genus of Hawaiian swordtail, which has "an interesting courtship system," she said. Her work focuses on how they select their mates. Her research during her Adopt-A-Student summer involved closely observing a pond that had recently formed near Mentor Marsh. "How are these colonized by invertebrates? Which ones come first, etc.? And how does it change over time?" were the questions for which she sought answers.

Turnell was doing the second year of observations on this pond (another student had done the previous year's) and so they were able to compare the second year to the first, to see what had changed. "It was cool to see that diversity had increased," she said.

Like Adams, she also appreciated the requirement to present her research at the end of the summer during a poster session and oral presentation. That was an important part of the program's overall quality. "It was an excellent experience. I'd highly recommend it to others."

Golfing for a good cause

Hit the greens to support the Museum's youth health education initiatives. Join physicians, pharmacists, researchers, administrators and board members from health care organizations and other corporate teams across the region as they tee off Thursday, September 3 at Fowler's Mill Golf Course in Chesterland.

The Kelley Cup Golf Classic benefits the local, regional, national and international health programs offered by the Museum's Education Division. Last year, these programs reached more than 30,000 students across the globe.

Proceeds from the tournament fund scholarships for Junior Medical Camp; distance learning programs that reach

classrooms across the United States and internationally; Health on Wheels, an educational outreach program that brings health education to schools throughout Northeast Ohio; and Museum-instructed health classes.

Play begins at 9 am with a shotgun start. During the tournament, golfers can also compete in "Beat the Pro" and "Long Drive" challenges. Afterward, participants will adjourn at the 19th Hole Party for Health to relax, enjoy a buffet dinner and celebrate with this year's Kelley Cup champions.

To register a team, visit www.cmnh.org/site/KelleyCup.aspx or call (216) 231-4600 ext. 3286 by August 20. Sponsorship opportunities are also available.

Kelley Cup
GOLF CLASSIC

September 3, 2009
Fowler's Mill Golf Course



The nature of giving

There are people and places that you adopt as part of your family that become a deep part of your life. The Museum is such a place for Bill and Barbara Coleman. Growing up in Lakewood and South Euclid, and having both pursued degrees in zoology at Ohio Wesleyan College, the Colemans were well aware of the Museum and its programs. In 1962, they were excited that they were able to buy an 1862 vintage home surrounded by one of the Museum's nature preserves, now called the Coleman Tract.

While teaching at Lakewood High School, Bill worked two summers teaching Museum classes with former Education Supervisor Mary Flahive. Later he was part of the Vertebrate Paleontology I-71 fossil project recovering Devonian fossils. Barbara, who had a career as a librarian, started volunteering in the fall of 1994, first taking docent classes and later volunteering with former Museum Entomologist Sonja Teraguchi. Both Bill and Barbara were involved with the national Monarch Tagging Program directed locally by former Museum Director Hal Mahon and are members of the Kelleys Island Natural Areas Stewardship Committee. Barbara continues to volunteer in invertebrate collections, assisting with data entry for the Ohio Lepidopterists Long-Term Butterfly Count and has just completed a 10-year survey of the moths of Kelleys Island.

The Colemans have been actively involved with the Museum's Kirtlandia Society, and in 1979-80 were members when the first Donald S. Dean Adopt-A-Student program was proposed. For 30 years, the Kirtlandia Society has sponsored college students to spend eight weeks during the summer to work with curators. As retired educators and active naturalists, the Colemans are particularly fond of this program. They view it as a wonderful opportunity for young scientists to work in the field, side by side with seasoned scientists.

"The Adopt-A-Student program



allows students to learn skills they can't learn in books and in the lab — this is real hands-on experience," said Barbara. "Some students learn this isn't for them and for others, it sets their path in life. That is why we love it. We are fortunate that over the years we have been able to contribute to the program and help it grow. But it is really because of everyone's commitment and support that the program continues to be an important part of the Museum."

Barbara recently spoke with some parents of former Adopt-A-Student graduates. She said it was wonderful to have parents tell her that the program gave their children direction in life and that the experience was very positive for them. The Colemans find it rewarding to be able to give these students the opportunities they might not otherwise have, to help them learn more about the natural world and to see them share their passion with others.

"Being a part of this Museum has enriched our lives. We have such close ties to the Museum that it's like our family," said Barbara. "We look forward to many more years of volunteering and being involved with the Adopt-A-Student program," she added.

Members of The Kirtlandia Society and others interested in furthering the goals of the Adopt-A-Student program have donated \$317,669 in support. The Adopt-A-Student Endowment was established in 1993. Gifts totaling \$659,434 have been contributed over the years, including \$400,000 in memory of former Board of Trustee President Maynard H. Murch IV from The Murch Foundation and Robbins & Myers, Inc.

If you would like to learn more about the Adopt-A-Student program and how you can help support this unique educational experience, contact Development at (216) 231-4600, ext. 3286.

Acknowledgments

The Museum gratefully acknowledges the following gifts and grants made between March 7, 2009 and May 8, 2009.

The **Martha Holden Jennings Foundation** renewed its support of Circle Sampler Camp scholarships with a grant of \$4,600.

The **Ohio Department of Natural Resources Division of Wildlife** contributed \$50,000 toward the purchase of the Burkholder Tract in the Grand River watershed.

The following individuals generously contributed \$1,500 or more to the Museum's Annual Fund and/or to a restricted fund and therefore have been named to **The Linnaean Society**.

Linnaean Kingdom (\$10,000 and above)
William and Amelia Osborne

Linnaean Phylum (\$7,500-\$9,999)
Robert and Janet Neary

Linnaean Class (\$5,000-\$7,499)
G. Russell and Constance Lincoln
Robert and Jean Mathews
Dan and Marjorie Moore
Thomas and Anne Tormey
Dickson and Ann Whitney

Linnaean Order (\$2,500-\$4,999)
Kathleen L. Barber
William and Barbara Coleman
George and Susan Klein

Linnaean Family (\$1,500-\$2,499)
William and Mary Conway
Mrs. Judith C. Murch
Peter and Donna Pesch
Mark and Melanie Smrekar
Walter R. Stephens
Bertalan L. Szabo
Charles R. Thomas
Betty Weiss
Jeffrey and Missy Wert

The following organizations generously contributed \$1,000 or more to the Museum's Annual Fund and/or to a restricted fund and therefore have been named to **The Corporate Partners Program**.

Corporate Fellow (\$5,000-\$9,999)
The Cleveland Clinic

Corporate Benefactor (\$2,500-\$4,999)
ECG Inc.

Corporate Patron (\$1,500-\$2,499)
Fairmount Minerals Ltd.

Corporate Contributor (\$1,000-\$1,499)
Best Buy Elyria
Paran Management Company, Ltd.

The Museum has made every effort to include all appropriate names. If you are aware of any gifts not honored, please contact Jeffrey Gueulette, Director of Annual Giving, at (216) 231-4600, ext. 3287.



The Museum gratefully acknowledges the citizens of Cuyahoga County for their support through Cuyahoga Arts and Culture.

Making Tracks

Staff and volunteer publications and presentations

Curator of Invertebrate Paleontology **Dr. Joe Hannibal** co-authored "Maximilian, Prince of Wied's Trip Along the Ohio and Erie Canal in 1834: An Annotated New Translation," with S.F. Thomas and M.G. Noll. The article was published in the Vol. 116, 2009 issue of *Ohio History*.

Curator and Head of Mineralogy **Dr. David Saja**, co-authored "Bathysiphon (Foraminiferida) at Pacheco Pass, California; A Geopetal, Paleocurrent and Paleobathymetric Indicator in the Franciscan Complex." The article appeared in Vol. 24, No. 3, March 2009 issue of the journal *PALAIOS*.

Hannibal and **Saja** also presented numerous papers at the North-Central Section Meeting of the Geological Society of America in Rockford, Illinois in April. **Hannibal** presented a paper titled "Millstones Along the Cuyahoga and Other Streams of the Western Reserve: Rock Type, Provenance, and Trends in Usage." **Saja**

presented one titled "Late 18th and Early 19th Century Granite Millstone Production in Northeastern Ohio." In addition, **Hannibal** co-authored two other papers that were presented, including "Foot-long Phyllocarids: Large Archaeostracans (Phyllocarida) from the Borden Formation (Mississippian, Osagean) of Kentucky." The other paper he presented was "An Arthropod-Zoophycoid Assemblage in the Upper Devonian (Famennian) Chagrin Shale Member of the Ohio Shale," which was co-authored by **Doug Dunn**, assistant, Invertebrate Paleontology.

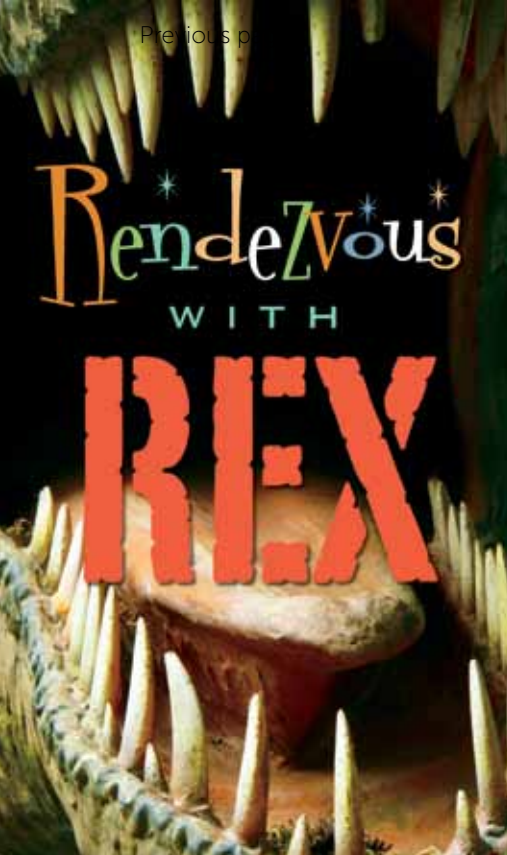
Curator of Archaeology **Dr. N'omi Greber** served as guest editor and authored three articles published in the Vol. 34, No. 1, Spring 2009 issue of the *Midcontinental Journal of Archaeology*. Titled "Re-interpretation of a Group of Hopewell Low Mounds and Structures, Seip Earthworks, Ross County, Ohio," the journal volume describes the research done by Greber and a team of archaeologists who studied earlier research done on the Hopewell Seip Mound near Chillicothe. Museum Research Associate **Katharine Ruhl** also published a chapter in the journal titled "Ceramics from 1971-1977 Excavations."

Museum Volunteer **Dr. Peter Pesch**, Emeritus Professor of Astronomy at Case Western Reserve University, wrote an article titled "Data Entry and Serendipity: Bird Study Specimen Collection at CMNH Intersects with Life of Volunteers" that appeared in the Vol. 6, No. 1, Spring 2009 issue of *The Cerulean*. This is the quarterly newsletter of the Ohio Ornithological Society.

Staff news

The Museum became an Authorized Provider of American Red Cross programs in October 2008.

In April, the following Museum curators, staff and volunteers completed the American Red Cross' Adult CPR/AED (Automated External Defibrillator) and First Aid certification course: **David Chapman**, **Doug Dunn**, **Dr. Joe Hannibal**, **Gary Jackson**, **Liz Martello**, **Dr. Michael Ryan**, **Dr. David Saja** and **Dale Zelinski**. Museum Distance Learning Coordinator/Science Instructor **Lee Gambol**, who is a Certified Red Cross Instructor, taught the course. An Adult, Infant and Child CPR course will be offered in September.



Women's Committee benefit

Get ready for a roaring good time. Save the date and plan to join the Museum's Women's Committee on Friday, October 9 for *Rendezvous with Rex*. The dinosaur-themed party will benefit the Museum's educational programs.

The event steps back in time to the age of dinosaurs. Guests will get a sneak preview of *Dinosaurs: Ancient Fossils, New Discoveries*, the American Museum of Natural History's touring exhibition, which opens to the public at the Museum October 10. Attendees can dine, be entertained and mingle among the fossilized creatures that reside in Kirtland Hall and enjoy all of the Museum's galleries and exhibitions.

"Evening festivities will include cocktails, delicious food and dancing to

the beat of the Fat City Band," said Benefit Chair Betsy Stueber. "Guests can also bid on out-of-the-box auction items, meet a paleontologist and have their photo taken with the Museum's imposing *T. rex*."

The event starts at 6:30 p.m. and ends at midnight. Dress is casual. Proceeds from the benefit are earmarked for Museum educational programs, including the Explorer Series, which has been supported by Women's Committee underwriting since the 1970s.

So mark your calendars and prepare for some prehistoric fun. Ticket prices are \$125, \$250, \$500 and \$1,000. For more information, contact Beth Whalley in Development at (216) 231-4600 ext. 3286 or bwhalley@cmnh.org.



Outdoor adventures

Do you have what it takes to endure a weekend wilderness challenge? Are you ready to escape into nature? If you haven't hiked one of the Museum's nature preserves or taken one of our field trips, summer is a perfect time to experience nature up close.

Join our naturalists for unique experiences where you can search for butterflies on Kelley's Island, discover what fish live in the scenic Grand River or explore the rare habitats of our private natural areas. The Museum offers plenty of programs for adults, children or your entire family.

But even after summer is gone, these outdoor adventures continue into the fall

and winter months. Plan ahead now to join other adventure seekers for these two exciting adult field trips in September:

Survival Techniques for Backpackers Friday, September 4 through Sunday, September 6

What would you do if you were lost in the wilderness without modern technology? This training expedition to the Allegheny National Forest will teach participants the basics of wilderness survival, such as starting a fire, navigating by the stars and identifying edible plants.

A mandatory pre-trip meeting will be held August 19 at 7 pm. Members: \$195; nonmembers: \$220.

Autumn Weekend Adventure Friday, September 25 through Sunday, September 27

Spend the weekend exploring Conneaut Creek waterfalls, hemlock forests, sand dunes and Kingsville Swamp. Enjoy morning bird walks, night hikes, stargazing and campfire camaraderie. Stay in cabins at Camp Cavalry along the shores of Lake Erie in Ashtabula County. Members: \$70; nonmembers: \$80.

For details about these field trips and other outdoor adventures, call (216) 231-4600, ext. 3214 or visit www.cmnh.org.

Museum Events and Programs

Museum Events

Wade Oval Wednesdays

Wednesdays through August 26, 6 to 9 pm

University Circle's free summer concert series presents an array of top musical entertainment ranging from jazz to reggae to Irish cultural genres. Come to the Circle and take advantage of extended hours at the Museum, as well as at the Cleveland Botanical Garden and The Cleveland Museum of Art.

Visit www.universitycircle.org for programming information.



2009 Natural Areas Wine Tours

Co-sponsored by Ohio Wine Producers Association

We've paired tours of Museum natural areas with opportunities to taste the vintages produced by Northern Ohio wineries. Each Saturday event starts at 10 am with a light hike guided by Museum staff. Limit 30 participants per date. For details or to register, visit www.cmnh.org or call (216) 231-1177. Fee: \$35 per person

Tour Dates and Destinations

July 18: Geneva Swamp in Ashtabula County and Debonné Vineyards in Madison

August 22: Burkholder Preserve in Ashtabula County and Laurello Vineyards in Geneva

September 26: Wendtwood Easement in Lorain County and Jilbert Winery in Valley City

Museum Programs

READ! SOAR! EXPLORE!

Wednesday evenings in July, 4 to 7 pm, in the Museum Store

The Museum's READ! SOAR! EXPLORE! program is celebrating its fifth anniversary. More than 300 children and families have signed up as members. They have participated in fun crafts, games and experiments and have had opportunities to meet Museum staff. The program has helped families build great libraries of books for themselves by providing a diverse selection of titles each season. Participants have completed hundreds of bonus projects, which have been displayed in the Museum Store. READ! SOAR! EXPLORE! members earn points for the events they attend, the books they purchase and the projects they do outside the Museum. For their efforts, the Museum Store provides a \$10 gift certificate to participants who earn 250 points. Find out more at www.cmnh.org/rse.aspx. Sign up today and join the fun.

July 1: Celebrate Good Times

Celebrate the fifth anniversary of READ! SOAR! EXPLORE! We'll learn about other milestones taking place this year.

July 8: Wild About Books

We'll have some of our favorite books on hand for story time, as well as other activities.

July 15: Game Night

Game nights have always been a program favorite. We'll bring out some of the best games we've played and discover the fun all over again.

July 22: Craft Night

Paper, crayons, scissors and glue. Sometimes that's all you need to make words from a book leap off the page. Join us as we make some of our favorite crafts.

July 29: Tell Me More

Bonus points are a big part of READ! SOAR! EXPLORE! They offer you a chance to discover the world outside the Museum and tell us what you've learned. We'll set up some projects to get you started on your way to exploration so you can earn more points.

Museum Events and Programs

For tickets or reservations for Museum events, call (216) 231-1177 or 800-317-9155, ext. 3279, or purchase online at www.cmnh.org.

In the Smead Discovery Center

Monday through Saturday, 10 am to 4:30 pm;
Wednesday, 10 am to 8 pm; Sunday, 1 to 4:30 pm.
Free with Museum admission.

Visit the Smead Discovery Center for hands-on fun on the Museum's Lower Level. Visitors of all ages are welcome in this multigenerational space. We have concrete activities for tots and "brain buster" puzzles for teens and adults. Play a birdsong piano, touch real fossils, dig for a dinosaur, use a microscope and much more! Take our honeybee fact/fiction quiz; learn about Charles Darwin's fascination with earthworms; and check out our new and improved giant world map. Additionally, check out the results of the Discovery Center's ongoing sustainability project: the quest to recycle, reuse and repair things that would otherwise go in the trash (broken plastic dinosaurs, books with broken bindings, etc.) Then, take some of these ideas home with you.

Smead Discovery Center Programs Summer Show and Tell

Wednesdays in the Smead Discovery Center

Bring your family and your questions and get ready for hands-on fun. Stay as little or as long as you like. Each week will feature a special make-and-take craft and a resource person who will make science fun and understandable for visitors of all ages. They will show and tell you about . . .

Dinosaurs!

Wednesday, July 1, 3 to 5:30 pm
With a new *T. rex* and a refurbished *Allosaurus* in the works, what has our paleontology department been up to this past year? What do the paleontologists do in the lab in the Museum's basement and what is a "cast" anyway? Casting Technician David Chapman of the Museum's Vertebrate Paleontology Department will bring some special items from the lab to show and tell you about. Our craft will be a hatching dinosaur.

Archaeology!

Wednesday, July 8, 3 to 5:30 pm
What's an arrowhead? A spearpoint? Is there any difference? The person who can tell you is archaeologist and Museum Educator Mark Kolleyer. He will share Native American traditions with us. Make and take an arrowhead necklace. Or is it a spearpoint necklace? You'll be able to tell us.

Glow Germs & the Human Body!

Wednesday, July 15, 3 to 5:30 pm
Health Educator Lee Gambol is a wealth of health knowledge. She also does a great movie phone impression. She will

combine health and humor and show you how to breathe easier after making a lung model. She'll also test your hand-washing technique with the "glow germs" method. Don't miss this one!

Honeybees and Lightning Bugs!

Wednesday, July 22, 3 to 5:30 pm
Why would you keep bees? Is it difficult? Do you every get stung? How does the honey taste? Feel free to ask Museum Educator Nancy Howell any of those questions that are bugging you. She will share the science of beekeeping with you. Our make-and-take craft will be a beeswax candle. Fireflies aren't flies at all. They're beetles and they're quite special. Discovery Center Coordinator Beth Gatchell will tell you about what makes them glow. Then, make a lightning bug craft you can take home and wear.

Taxidermy!

Wednesday, July 29, 3 to 5:30 pm
Did you ever wonder about the science of taxidermy? Why do Museums have stuffed animals? Come find out. Make and take your own model (no real animals involved).

Live Animal Programs

Wildlife Center staff and volunteers will introduce visitors to our neighborhood wildlife using live ambassadors from the Museum's animal teaching corp and, depending on the weather, offer tours of the Ralph Perkins II Wildlife Center and Woods Garden. **Saturday and Sunday, 1 pm in the Museum lobby and 3 pm in the Ralph Perkins II Wildlife Center & Woods Garden. Through 8/28: Monday through Friday, 1:30 pm in the lobby or auditorium. Free with Museum admission.**

Wildlife in Our Big Backyard

Are there hares in your hedges? Raccoons on your rooftop? Owls in your outback? Snakes in your standpipes? Deer in your Rhododendrons? Well, you are not alone. There is a world of wildlife that lives just beyond your back door. Join us in a celebration of backyard wildlife, the wild creatures that share your backyard, our backyard and everybody's backyard here in this part of the world. Along the way, we'll explore the special attributes of Ohio's wildlife and the special places that sustain them. Come join us. It's wild out there!



Carol H. Sweet Nature Center at Mentor Marsh

Mentor Marsh is an interpretive nature preserve of the Museum and the Ohio Division of Natural Areas and Preserves. It is located at 5185 Corduroy Road, Mentor. Trails: open daily, year-round, dawn to dusk. Nature Center: Open Saturday and Sunday, noon to 5 pm. **All programs are offered from 2 to 3:30 pm and are free with registration at rdonalds@cmnh.org or (440) 257-0777.** Please dress for the weather; trails may be muddy.

Special Programs

July 5: Happy Independence Day!

Commemorate our country with a walk in the wild. Join a naturalist for a hike to discover the wonders of this natural area in our corner of the nation.

July 12 & 19: Naturalist's Choice

Come join our naturalist on a hike and learn what's going on seasonally in and around the marsh.

July 26: Lagoons Discovery Hike

Meet us at the Mentor Lagoons City Nature Preserve trailhead (8365 Harbor Drive) for a walk at the western edge of the marsh.

August 2: Dog Days of Summer

What's stirring in the woods and marsh during these hot, sultry summer days? Join us for a discovery walk to see what we can find.

August 9: Winged Wonders

We'll start at the Nature Center to learn about the biology of dragonflies and damselflies, and then head out to the Marsh to find some of nature's winged wonders. Please bring binoculars (we'll have a few to lend).

August 16: Naturalist's Choice

Come join our naturalist on a hike and learn what's going on seasonally in and around the marsh.

August 23: In Praise of Prairies

Let's explore the prairie plantings around the Nature Center to see what's blooming, learn about the plants and find out what kinds of critters are using this unique habitat.

August 30: Lagoons Hike

Meet us at the Mentor Lagoons City Nature Preserve trailhead (8365 Harbor Drive) for a walk at the western edge of the marsh.

Saturday Science Programs

Saturday Science is a family program geared toward kids in elementary school. Each program is held the third Saturday of each month, and includes a story, a hike and a craft or activity. Meet at the Nature Center. Registration is required at (440) 257-0777 or rdonalds@cmnh.org. Limit 20. One adult for every three children please. Dress for the weather – light rain will not cancel the program. Insect repellent is recommended.

July 18: Camouflage

Some organisms are masters of blending with their surroundings. We'll examine some of these critters that can disguise themselves in nature.

August 15: "Unnature" Trail

What do we expect to find on the trails, and what are some unnatural occurrences?



5	<p>Summer Camp, Junior Medical Camp, Grades 6-8, 9 am (thru 7/10); Youth Program, American Indian Adventure, 9:30 am (thru 7/10); Youth Program, Future Scientists: Summer Session, 9 am (thru 7/16)</p>	6	<p>Youth Program, Student Naturalists II: Discovering Biodiversity 9 am (thru 7/10); Adult Field Trip, Mystifying Mitchell's Satyr 10 am</p>	1	<p>Smead Discovery Center, Dinosaurs!, 3 pm; READ! SOAR! EXPLORE!, 4 pm; Wade Oval Wednesday, 6 pm;</p>	2	<p>Adult Field Trip, Digging up the "Dirt," 10 am</p>	3	<p>Adult Field Trip, The Kelleys Island Butterfly Hunt, 9 am</p>	4
12	<p>Summer Camp, Circle Sampler Camp, Grades 4-6, Session III, 9 am (thru 7/17); Junior Medical Camp, Grades 8-10, 9 am (thru 7/17); Youth Program, From the Lake to the Steel Yard: Cleveland Connections, 9 am (thru 7/16)</p>	7	<p>Youth Program, Budding Naturalists, 1:30 pm (Tuesdays thru 7/28)</p>	8	<p>Smead Discovery Center, Archaeology!, 3 pm; READ! SOAR! EXPLORE!, 4 pm; Wade Oval Wednesday, 6 pm; Guild of Nature Artists, 7 pm; Cleveland Geological Society, 7:30 pm</p>	9	<p>Adult Field Trips, Boreal Nesters and Hemlock Wonders, 8 am; Walnut Beach 10 am</p>	10	<p>Adult Field Trip, Life in the Gorge: Fish and Mussels of the Grand River, 10 am; Micromineral Society, 1 pm</p>	11
19	<p>Summer Camp, Circle Sampler Camp, Grades 4-6, Session IV, 9 am (thru 7/24); Junior Medical Camp, Grades 7-9, 9 am (thru 7/24); Youth Program, Rocket and Space Adventure, 9 am (thru 7/24); Adult Field Trip, Tiger Hunt: The Beauty of Tiger Beetles, 10 am</p>	14	<p>Smead Discovery Center, Honeybees and Lighting Bugs!, 3 pm; READ! SOAR! EXPLORE!, 4 pm; Wade Oval Wednesday, 6 pm; Guild of Nature Artists, 7 pm</p>	15	<p>Smead Discovery Center, Glow Germs and the Human Body, 3 pm; READ! SOAR! EXPLORE!, 4 pm; Explorer Travel Club, Total Eclipse & Highlights of China (thru 7/25)</p>	16	<p>Family Field Trip, The Nature Team: How Cites Affect Rivers, 10 am</p>	17	<p>Family Field Trip, Leave No Trace Outdoor Ethics Awareness Workshop, 9 am; Natural Areas Wine Tour, Geneva Swamp and Debonné Vineyards, 10 am</p>	18
26	<p>Summer Camp, Junior Medical Camp, Grades 7-9, 9 am (thru 7/31); Youth Program, Wonderful World of Weather, 10 am (thru 7/31)</p>	21	<p>Adult Field Trip, Urban Botany Trek: Forest Hills Park, 9 am; Smead Discovery Center, Taxidermy!, 3 pm; READ! SOAR! EXPLORE!, 4 pm; Wade Oval Wednesday, 6 pm</p>	22	<p>Adult Field Trip, Urban Botany Trek: Forest Hills Park, 9 am; Smead Discovery Center, Taxidermy!, 3 pm; READ! SOAR! EXPLORE!, 4 pm; Wade Oval Wednesday, 6 pm</p>	23	<p>Family Field Trip, The Nature Team: How Cites Affect Rivers, 10 am</p>	24	<p>For Visitor Information call: (216) 231-4600 or 800-317-9155 or visit www.cmmh.org</p>	25
26	<p>Harold Terry Clark Library Tuesday through Friday, 10 am to 2:30 pm The Museum's non-lending research library features books and periodicals on science topics. Library hours occasionally vary. Please call ext. 3222 to confirm library staff is on duty.</p> <p>Museum Store Hours Monday through Saturday, 10 am to 5 pm; Wednesday, 10 am to 8:30 pm, Sunday, noon to 5 pm</p>	28	<p>Wade Oval Wednesday, 6 pm; Guild of Nature Artists, 7 pm</p>	29	<p>Wade Oval Wednesday, 6 pm; Guild of Nature Artists, 7 pm</p>	30	<p>Wade Oval Wednesday, 6 pm; Guild of Nature Artists, 7 pm</p>	31	<p>Wade Oval Wednesday, 6 pm; Guild of Nature Artists, 7 pm</p>	31

August

Exhibits & Shows
Kahn Hall – Surviving: The Body of Evidence, through August 30
Fawick Gallery – Visions of Galapagos, July 18 through October 11
Lower Level Gallery – Fieldwork

Museum Hours
 Monday through Saturday, 10 am to 5 pm; Wednesday, 10 am to 10 pm (Observatory open 8:30 to 10 pm through May, weather permitting). Sunday, noon to 5 pm

Adult Field Trip, Rafting the Colorado River through Cataract Canyon: Firsthand Awareness of Water Issues in the Western United States, (thru 8/9)

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Wade Oval Wednesday, 6 pm

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Adult Field Trip, Morning on the River, 10 am

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Family Field Trip, Leave No Trace Outdoor Ethics Awareness Workshop, 9 am; Adult Field Trip, Giant Hunting at the Grand River Terraces, 10 am; Fen Exploration in the Outback, 10 am

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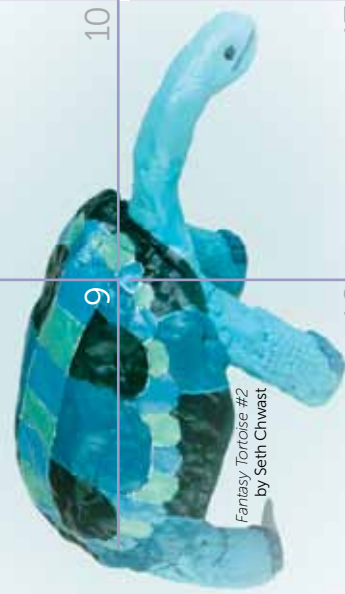
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Fantasy Tortoise #2 by Seth Chwast

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Visions of Galapagos exhibition opens

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– the inspired works of seth chwast –

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Just for kids

Charles Darwin and the Galapagos Islands

Did you know that famous naturalist Charles Darwin was born on the same day as former president Abraham Lincoln? As a child, Darwin wasn't the best student because he didn't like to study and preferred to play outside with his friends. Darwin also liked to read, go fishing and collect things like rocks, stamps and coins.

He and his older brother enjoyed conducting chemistry experiments. These experiments taught Darwin about observation and how to look for different reactions. These lessons were helpful later in life when he began to study plant and animals.

While exploring the tropical islands of the Galapagos, Darwin noticed that each island had plants and animals that had similar characteristics but were different in very specific ways. This is where the inspiration for Darwin's book *The Origins of Species* began.

Visit the Museum this summer to tour our exhibits *Surviving: The Body of Evidence* and *Visions of Galapagos* to learn more about Darwin, check out some of his original books and see colorful animal artwork inspired by the Galapagos Islands.

Test your memory

Make your visit to the Museum even more fun. Test your power of observation and memory.



When you arrive, stop at the "How

Good is Your Memory?" table

located in the lobby.

Then, explore the Museum's galleries and exhibits noting where you find the objects showcased in this tabletop display.



Where are they? What are they? Who will find them first? Who will find them all? Let the search begin!



Museum Discovery Cards

Be sure to pick up the latest Museum Discovery Card during your visit. Collect a new card each month to learn about our prehistoric creatures.

