

# Tracks

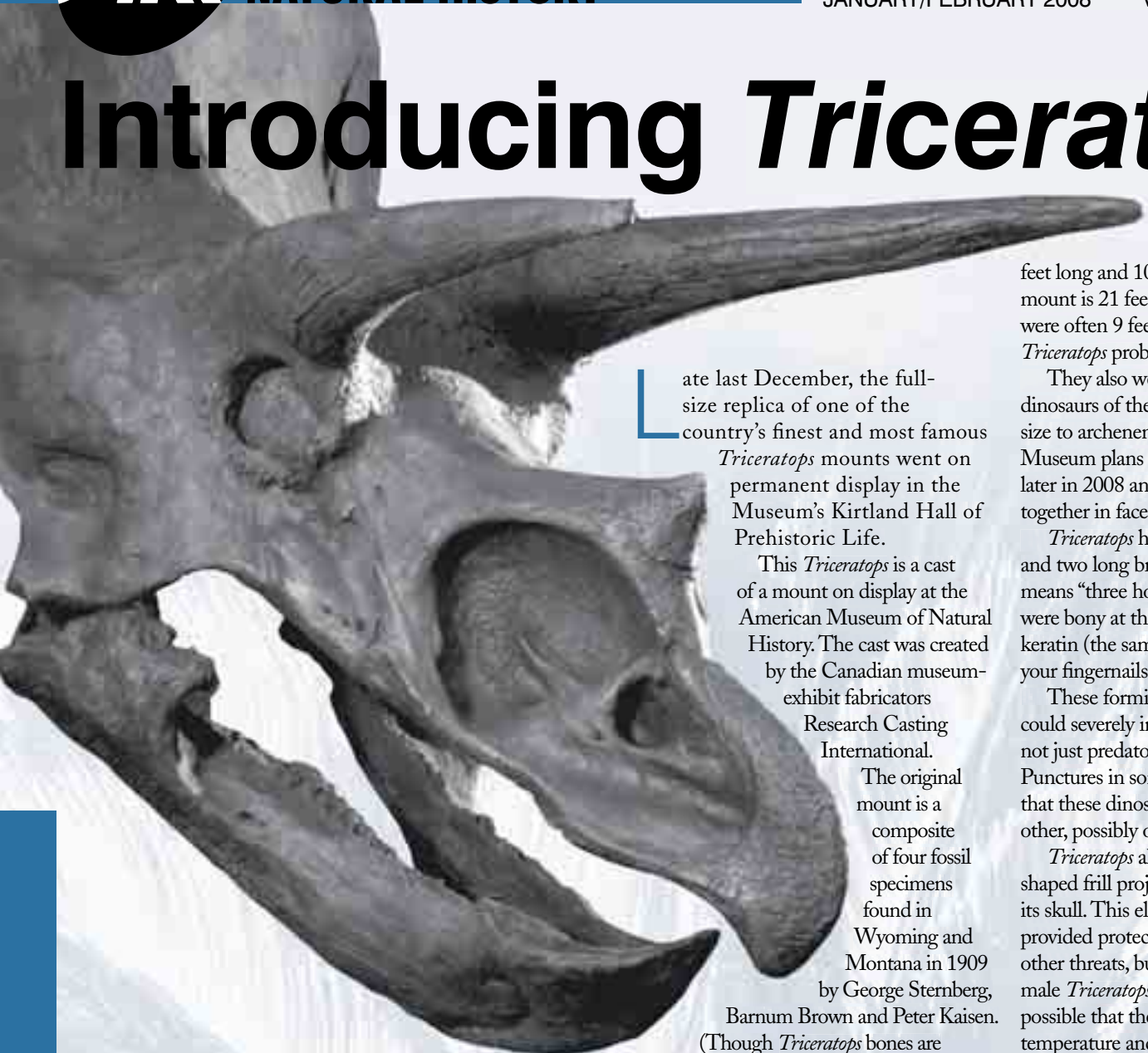


Cleveland Museum of  
NATURAL HISTORY

JANUARY/FEBRUARY 2008

VOLUME 36, NUMBER 1

## Introducing *Triceratops*



The Museum's newest  
dinosaur is now on  
display in Kirtland Hall

ate last December, the full-size replica of one of the country's finest and most famous *Triceratops* mounts went on permanent display in the Museum's Kirtland Hall of Prehistoric Life.

This *Triceratops* is a cast of a mount on display at the American Museum of Natural History. The cast was created by the Canadian museum-exhibit fabricators Research Casting International.

The original mount is a composite of four fossil specimens found in Wyoming and Montana in 1909 by George Sternberg, Barnum Brown and Peter Kaisen.

(Though *Triceratops* bones are relatively common, as dinosaur fossils go, even partially complete skeletons are not.) Some parts of the mount were modeled after other *Triceratops* bones in the AMNH's collections.

The genus *Triceratops* was once divided into as many as 16 species. However, recent research has reclassified those into just two species, *Triceratops horridus* and *Triceratops prorsus*. The Museum's mount is that of *T. horridus*.

*Triceratops* lived during the Late Cretaceous Period, 68 million to 65 million years ago. It ranged throughout what is today Colorado, Montana, South Dakota, Wyoming, Alberta and Saskatchewan.

The genus as a whole was the largest of the horned dinosaur family (ceratopsians). Its members ranged between 20 and 28

feet long and 10 feet tall (the Museum's mount is 21 feet long). Their skulls alone were often 9 feet long. In life, a typical *Triceratops* probably weighed about 5 tons.

They also were among the biggest dinosaurs of their time, second only in size to archenemy *Tyrannosaurus rex*. (The Museum plans to acquire a *T. rex* replica later in 2008 and will display the two together in face-off pose.)

*Triceratops* had a short horn on its nose and two long brow horns. (Its genus name means "three horned face.") These horns were bony at the core, with a covering of keratin (the same substance that forms your fingernails).

These formidable lance-like structures could severely injure other dinosaurs — not just predators, but also its own kind. Punctures in some *Triceratops* skulls suggest that these dinosaurs clashed with each other, possibly over territory or mates.

*Triceratops* also had a broad, saddle-shaped frill projecting from the back of its skull. This elaborate structure probably provided protection from predators and other threats, but also may have helped male *Triceratops* attract females. It's also possible that the frill helped regulate body temperature and displayed patterns or colors in response to environmental stimuli.

*Triceratops*' jaws narrowed into a turtle-like beak, which it used to snip down plants that it then ground between long batteries of teeth. Massive amounts of this coarsely chewed vegetation probably fermented in its gut as part of the digestive process.

This dinosaur had a stance akin to that of a modern-day bulldog. Its hind limbs were perpendicular to its body. However, because of its barrel chest, its forelimbs jutted outward, and the upper arm bone (humerus) was nearly horizontal to its body.

*Triceratops* met its end at the close of the Cretaceous Period with the rest of the dinosaurs (birds excepted) during one of the Earth's five major extinction events.

# Creative heritage

A new Museum exhibition explores the robust folk art tradition of Oaxaca, Mexico.

In 1953, William and Evelyn Ward visited Oaxaca, Mexico, for the first time on their honeymoon. They were enchanted by the region's rugged landscape and its native people, whose way of life included a strong folk art tradition.

The Wards made more than 20 trips to the region together, photographing and interviewing local artisans and collecting their work. William, who worked as director of design at the Cleveland Museum of Art and a professor at the Cleveland Institute of Art, continued to visit Oaxaca even after Evelyn died in 1989.

The Wards' collection of folk art passed to the Museum after William's death in June 2004 and was accessioned in the summer of 2005. Starting February 1, selections from this exceptional collection, accompanied by the Wards' photographs, will be on display in Corning Gallery in the exhibition *Vibrancy of Tradition: Folk Art of Oaxaca, Mexico*.

Organized by Cultural Anthropology Curator Adriann Balok and intern Christine Salsgiver, the exhibition highlights several folk art forms in this Mexican region and demonstrates how they have endured over time. Many of the artists whose work is featured attained national and international reputations in the years following the Wards' visits.

Oaxaca is renowned for its ceramics, and several excellent examples are on

display. Specific styles are handed down from one generation to the next. Terracotta figurines and green pottery from the village of Santa Maria Atzompa show the influences of the native Zapotec and later Spanish cultures, respectively. Black pottery from the village of Coyotepec is made from dark clay that is fired under conditions promoting an oxidative reaction that further darkens it.

Visitors will probably recognize "chia" pottery — sculptures of rams, goats, deer and angels — but may be surprised to learn its heritage. The chia plant is a type of salvia that was eaten by Aztec warriors for strength.

Woodcarving is another Oaxacan specialty. The village of Arrazola, which lies in the foothills of Monte Alban, is home to numerous skilled carvers. Among the most famous of them is Manuel Jimenez, whose carving of a kneeling red bull is included in the exhibition.

Elsewhere in Oaxaca, craftspeople specialize in carving figures for the Day of the Dead. Several examples of these skeletal figures (called calveras) are on display. Families bring out these figures, usually as part of an altar, on November 1 and 2 to entice the souls of the deceased to return home for a celebration, then continue on to the spirit world.

The exhibition also highlights textiles, including examples of traditional clothing, such as the huipal and rebozo, as well as



Woodcarvings (above) and terracotta figurines (left) are among the folk art forms on display in the exhibition *Vibrancy of Tradition*.

blankets and rugs. Traditionally, weaving was done either with cotton or a fiber called ixtle, derived from the maguey plant, on a backstrap loom. Dyes were made from plants and insects, including the cochineal beetle, whose larvae create a vibrant red dye.

After colonization in the 1500s, the Spanish upright treadle loom and wool came into general use, and Catholic imagery was incorporated into weaving patterns and garment embellishments. Eventually, natural dyes were supplanted by aniline dyes (however, in recent times, there has been renewed interest in natural dyes).

*Vibrancy of Tradition* is a testament to the creative skills of the Oaxacan people and their determination to hold on to their heritage in spite of a changing world. It will be on display through April 27.



## Eco-Minded: ideas for living sustainably

### The Year of the Frog

The situation for the world's amphibians is dire. One-half to one-third of all amphibian species are threatened with extinction in our lifetime due to habitat loss, climate change, pollution and pesticides, introduced species, over-collection and, most urgently, a parasitic fungus called amphibian chytrid, a deadly disease rapidly spreading throughout the world. It is one of our planet's biggest environmental challenges.

The global conservation community has launched the "Year of the Frog" campaign in 2008 to raise awareness of the amphibian extinction crisis and support global and regional initiatives to save amphibians.

Locally, part of this campaign will include evening lecture by Panamanian herpetologist Edgardo Griffith on Wednesday, February 6, co-sponsored by Biodiversity Alliance and the Museum (see *Inside Tracks* for more information).

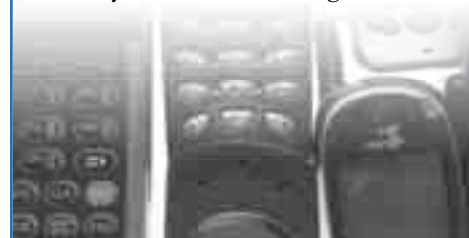
There are also actions you can consider taking on your own:

- Protect local watersheds: prevent soil erosion; don't dump toxic substances down storm drains; avoid releasing non-native species into local lakes, rivers and streams.
- Reduce your carbon footprint: a warming climate could worsen the current chytrid crisis and alter habitats so that they are inhospitable to native frogs and other amphibians. Find resources at [www.gcbl.org](http://www.gcbl.org).
- Join an effort to monitor amphibian populations locally. Frogwatch USA and the Ohio Frog and Toad Calling Survey are two volunteer-based programs.
- Support the Museum's Natural Areas Program and other conservation organizations that protect local natural areas that harbor amphibian habitats.
- Donate to Amphibian Ark ([www.amphibianark.org](http://www.amphibianark.org)), an effort to place

500 of the world's most threatened amphibian species into "protective custody" in zoos, aquariums and other institutions until they can be safely reintroduced into the wild when the chytrid threat has passed.

### Don't toss that cell phone!

Through January 31, bring a cell phone to the Museum for recycling and receive free admission (one admission per cell phone per person). Your donation may also be tax deductible. In landfills, cell phones and other electronics leach toxic compounds and heavy metals into soil and groundwater.



# Keeping Track with the Director

I'm pleased to report that our recent benefit, *Shenanigans*, was a great success.

I hope you were among the 577 people who joined us for this party hosted by the Museum's Women's Committee. If not, you missed a terrific evening, as you can see from the pictures on this page.

We were there to celebrate the accomplishments of the multitalented Larry Isard — artist, taxidermist and all-around inspiration. There's so much that was memorable: the good food, fine company and lively entertainment. There was the silent auction full of fabulous items to bid on and, of course, Larry's spectacular sculpture to admire. I would like to thank Event Chair Kristie Kohl and Women's Committee Chair Chris Weiss Pfeil for their countless hours of planning and work. Additionally, I'd like to recognize the table hosts for the evening who brought friends and family together to share the joy of this event, and all of the volunteers and Museum staff who worked behind the scenes.

Larry's sculpture will be on display in Fawick Gallery through March 23. Be sure to make time to see it.



Dr. Bruce Latimer  
Executive Director



**Clockwise from Top:**  
Tim Reynolds (l),  
Museum Board  
President Nat Smith  
and Trustee John  
Hollister III

Arch McCartney,  
Terrell Pim, honoree  
Larry Isard and Emily  
McCartney

Executive Director Dr.  
Bruce Latimer and  
Women's Committee  
Chairperson Chris  
Pfeil



Shenanigans  
Chairperson and  
Museum Trustee  
Kristie Kohl (l) with  
Cara and Howard  
Stirn

Artist Chuck  
Herndon, Margaret  
Wheeler and Cynthia  
Herndon

The Museum's  
opossum and Wildlife  
Resources Specialist  
Jennifer Wilson greet  
Museum trustee  
Anne Jones.



## January

- Wed 2 **Planet Chat**, How Introduced Species are Changing Ohio's Forests, 5 pm  
**READ! SOAR! EXPLORE!**, 5 pm  
**Kirtland Bird Club**, *Trinidad and Tobago*, Bill Murphy, 7:30 pm
- Thu 3 **Adult Program**, An Introduction to the Art of Fly-Tying (Thursdays thru 2/7), 7 pm
- Sat 5 **Youth Program**, Junior Docent Training (Saturdays thru 2/23), 1 pm  
**Photographic Society**, 10 am  
**Adult Field Trip**, Winter Birdwatching, 10 am
- Wed 9 **READ! SOAR! EXPLORE!**, 5 pm  
**Guild of Nature Artists**, 7 pm  
**Cleveland Geological Society**, 7:30 pm  
**Gemological Society**, 7:30 pm
- Sat 12 **Kirtlandia Society**, *Rapa Nui, aka Easter Island*, Lillian Brinnon, 9:30 am
- Sun 13 **Nature League**, Lake Gull Watching at Gordon Park, 10 am
- Mon 14 **Audubon Society of Greater Cleveland**, *The Grandeur of Old Growth: Exploring the Concept of the Primeval Forest in Northeast Ohio*, Harvey Webster, 7:30 pm
- Wed 16 **READ! SOAR! EXPLORE!**, 5 pm  
**Trout Club**, 6 pm
- Fri 18 **Explorer Series**, *The Tree Kangaroo Conservation Program*, Dr. Lisa Dabek, 7:30 pm
- Sat 19 **Adult Field Trip**, Winter Hike, 10 am
- Mon 21 **Dr. Martin Luther King, Jr. Discovery Day**, Museum and Smead Discovery Center, 10 am
- Wed 23 **READ! SOAR! EXPLORE!**, 5 pm  
**Adult Program**, Gallery Talk with Sculptor Larry Isard, 6 pm  
**Guild of Nature Artists**, 7 pm
- Fri 25 **Preschool Program** (Fridays thru 2/8), Big, Long and Tall, Tiny Trekkers, 9:30 am, Young Explorers 11 am
- Sat 26 **Preschool Program** (Saturdays thru 2/9), Big, Long and Tall, Tiny Trekkers, 9:30 am, Young Explorers 11 am  
**Youth Programs**, Museum Trekkers and Explorers: Ohio Explorers and Pioneers, 10 am; Budding Naturalists: Animal Extremes (Saturdays thru 2/9), 1 pm  
**Micromineral Society**, 1 pm
- Sun 27 **Notes from Nature: A Concert for the Natural Areas**, 5 pm
- Wed 30 **READ! SOAR! EXPLORE!**, 5 pm
- Thu 31 **Adult Program**, Touch Astronomy (Thursdays thru 3/13), 7 pm

## February

- Sat 2 **Youth Program**, Winter Student Naturalists I (Saturdays thru 2/16), 9 am  
**Photographic Society**, 10 am  
**Adult Field Trip**, Groundhog Day in Medina County, 10 am  
**Explorer Travel Club** (thru 2/9), Monarch Butterfly and Mexican Cultural Tour
- Wed 6 **Planet Chat**, Dreaming of Blooms: A Native Wildflower Garden, 5 pm  
**"Year of the Frog" Lecture**, Edgardo Griffith, 7 pm  
**Kirtland Bird Club**, *Birding Central Kenya*, Dwight and Ann Chaser, 7:30 pm
- Sat 9 **Kirtlandia Society**, *The Incomparable Biodiversity of the Oaxacan Sierra Jaurez*, Hans Clebsch, 9:30 am  
**Clock Day**, 10 am  
**The Natural History of Chocolate**, 6:30 pm
- Sun 10 **Mexican Cultural Festival**, 10 am
- Mon 11 **Audubon Society of Greater Cleveland**, *How Research in Chile and Bolivia is Improving Our Understanding of South American Mammal Evolution*, Dr. Darin Croft, 7:30 pm
- Wed 13 **Show and Tell Special: Meet a Paleontologist**, Smead Discovery Center, 3:30 pm  
**Guild of Nature Artists**, 7 pm  
**Cleveland Geological Society**, *A Cast of Thousands*, Anne Sanford, 7:30 pm  
**Gemological Society**, 7:30 pm  
**Cleveland Archaeological Society Lecture Series**, *The Uxbenka Archaeological Project: Recent Discoveries in Belize*, Dr. Phillip Wanyerka, 7:30 pm
- Fri 15 **Explorer Series**, *What You Should Know About Global Warming: Past, Present and Future*, Dr. George Collins II, 7:30 pm
- Sat 16 **Adult Field Trip**, Raptor Rendezvous, 10 am
- Sun 17 **Adult Field Trips**, Snowshoeing for Snowshoe Hares, 9 am; Cleveland's Hot Winter Birds, noon
- Mon 18 **Presidents Day: Hop to It**, Smead Discovery Center, 10 am
- Wed 20 **Trout Club**, 6 pm
- Thu 21 **Adult Program**, Intermediate Fly-Tying (Thursdays thru 3/27), 7 pm
- Sat 23 **Youth Programs**, Winter Student Naturalists II (Saturdays thru 3/8), 9 am; Museum Trekkers and Explorers: Wet! Wild! Water!, 10 am  
**Micromineral Society**, 1 pm  
**Emerge: A Celebration**, 8 pm
- Wed 27 **Youth Program**, Growing Up and Liking It, 6:30 pm  
**Guild of Nature Artists**, 7 pm

## Exhibits & Shows

<b>Kahn Hall</b>	<i>Humans: A Field Guide</i> Through April 27 <i>EarthWorks: Virtual Explorations of the Ancient Ohio Valley</i> Through January 6
<b>Fawick Gallery</b>	<i>Animal Expressions: Bronzes by Larry Isard</i> Through March 23
<b>Corning Gallery</b>	<i>Vibrancy of Tradition: Folk Art of Oaxaca, Mexico</i> Opening February 1
<b>Lower Level Gallery</b>	<i>Fieldwork: Searching for Human Origins in the Afar</i>
<b>Shafran Planetarium</b>	<b>We Are Stardust</b> Monday through Friday, 2:30 pm; Wednesday, 8 pm; Saturday, 10:30 am, 12:30, 2 and 4 pm; Sunday, 12:30, 2 and 4 pm <b>Children's Program: Humans: A Starry Field Guide</b> Saturday, 11:30 am and 3 pm; Sunday, 1:15 and 3 pm <b>Saturday schedule of show times will be in effect:</b> Jan. 2 to 4 and Feb. 18
<b>Smead Discovery Center</b>	Monday through Saturday, 10 am to 4:30 pm; Wednesday, 10 am to 8 pm; Sunday, 1 to 4:30 pm
<b>Live Animal Programs</b>	<b>Wildlife in Our Big Backyard</b> Saturday and Sunday, 1 and 3 pm; <b>additional programs:</b> Jan. 2, 3 and 4 at 1:30 pm in the Museum Lobby
<b>Museum Hours</b>	Monday through Saturday, 10 am to 5 pm; Wednesday, 10 am to 10 pm (Observatory open 8:30 to 10 pm, weather permitting); Sunday, noon to 5 pm. Museum is closed New Year's Day, Tuesday, January 1.

# Making Tracks

## Birders: Come to the Ohio Breeding Bird Atlas II Data Get Together

New and experienced birdwatchers are invited to join Kirtland Bird Club members and Museum staff to enter bird sightings into the Ohio Breeding Bird Atlas II online database. The group will get together from 5 to 8 pm in the Museum library on the third Wednesday from January to October. Each month there will be a "Nesting Notes" talk by a speaker who will share bird atlas tips.

- January 16, 6:30 pm: Block Finding Made Easy, Aaron Boone, Atlas Coordinator
- February 20, 6:30 pm: Woodpeckers, Tom Leiden
- March 19, 6:30 pm: Nest Search Hints, Dr. Andy Jones, Museum Curator of Ornithology

## Associated society wins award

The Micromineral Society, one of the smallest of the Museum's associated societies — both in number of members as well as in the size of the minerals they enjoy — serves as one of its best ambassadors to the world of those who enjoy minerals and fossils. In October 2007, several members took the society's display of microminerals, enlarged plain and stereo photos, and pictures and text documenting its activities to the Detroit Mineral and Fossil Show. Their setup was awarded a silver cup as the Best Club Display at the show. The display

has been taken to many other shows around the country.

## Staff accomplishments

Curator and Head of Physical Anthropology Dr. Yohannes Haile-Selassie was elected a Fellow of the American Association for the Advancement of Science for his distinguished contributions to the field of paleoanthropology. In particular, the association honored him for the discovery and interpretation of new hominid species from Ethiopia.

Museum Curator of Invertebrate Paleontology Dr. Joe Hannibal and curator of Mineralogy Dr. David Saja presented a collaborative poster titled *Bowing of marble tablets and limestone panels inside nineteenth-century structures in northern Ohio shows that marble and limestone can deform inside buildings under variable, but relatively mild conditions*, at the Annual Meeting of the Geological Society of America in Denver on October 28.

During the first week of September 2007 three paleobotanists visited the Museum's Paleobotany Department to examine the Cleveland Shale specimens of club-mosses and collect spores for an ultrastructure study: Dr. Jiří Bek, Institute of Geology, Academy of Sciences of the Czech Republic and Museum Research Associate; Dr. Stanislav Opluštil, an associate professor in the Institute of Geology and Paleontology at Charles University in Prague; and Dr. Joe Psenick, head of the Paleobotany Department of The Museum of West Bohemia in Pilsen, Czech Republic.



Yohannes Haile-Selassie was honored by AAAS

Curator of Paleobotany Dr. Shya Chitaley, in collaboration with Dr. Dashrath Kapgate of J.M. Patel College in Bhandara, India, and Research Associate Dr. Nilamber Awasthi, published a paper in the June 2007 issue of *Palaeontographica, Abteilung B* titled *A permineralized conifer pollen cone from the Deccan Intertrappean beds (Uppermost Cretaceous) of India*.

Last December, Museum Research Associate and Case Western Reserve University Professor Dr. Darin Croft and colleagues in the U.S. and Chile announced the discovery of a new species of glyptodont, a group of now-extinct armored mammals most closely related to modern armadillos. The species, which they named *Parapropalaeohoplophorus septentrionalis*, is formally described in an article in the December 2007 issue of the *Journal of Vertebrate Paleontology* (vol. 27, no. 4).

## Look great, stay warm!

Feeling winter's chill? A cozy fleece vest or cotton-knit sweater featuring our signature dinosaur is just what you need to warm up. In adult sizes S to XXL. Colors: grey, black, lime (sweater); flint and tundra (vest).

### Museum Store Hours

Monday through Saturday, 10 am to 5 pm;

Wednesday, 10 am to 8:30 pm;

Sunday, noon to 5 pm

Shop online anytime at [www.cmnh.org](http://www.cmnh.org)

David Chapman from Vertebrate Paleontology



# Tales in bronze

Sculptor Larry Isard shares the ideas and stories behind his work.

The retrospective exhibition *Animal Expressions: Bronzes by Larry Isard*, on display in Fawick Gallery through March 23, celebrates the work of sculptor, Museum taxidermist and retired assistant director Larry Isard.

His formal artistic career started in 1970, when he took lessons from renowned artist William McVey and began creating bronze wildlife sculpture. Once he started looking, he found inspiration everywhere in the animal world, from river otters and housecats to the hippos and other creatures he saw on safari in Africa.

Isard's body of work has earned him great regard among fans of wildlife art. And his willingness to share his expertise and easygoing nature have earned him the admiration of fellow sculptors across the country.

Here are the stories behind several of the pieces included in his exhibition.



**Gothic Twilight** — This is Isard's favorite sculpture. He was inspired to create it after Dr. Merwin Tuttle, president of Bat Conservation International in Texas, visited the Museum with a live fruit bat. "It was a marvelous animal to watch," Isard recalls. "But once I started sculpting, it was hard to find a form to put it in." He tried a hollow log, then a branch before settling on a Gothic arch.



**Singing in the Rain** — "I used to read stories to my girls that were illustrated by Heinrich Kley. He was a German illustrator who liked to draw pictures of animals doing strange things," Isard says. "This is probably my least-realistic sculpture."

**Journey North** — (bottom left) This is actually the second version of this sculpture of a flock of birds. The original included many more birds in a tight mass. However, after returning to his Museum workspace after a month's absence, he found it on the floor, broken. He started over, deciding not to include as many birds this time.

**Kate's Dancer** — (bottom right) Isard created this sculpture as a Christmas present for his daughter Kate. "She rode for years as a kid, and Dancer was her horse," he explains.



## Acknowledgments

The Museum gratefully acknowledges the following gifts and grants made between September 15 and November 9, 2007.

Mentor Marsh received a \$1,000 grant from **The S. Livingston Mather Charitable Trust**.

**The Wolpert Fund** contributed \$500 to the Center for Regional Sustainability. **The Cleveland Foundation** awarded \$99,000 in support of the center's climate neutrality project.

**The William J. and Dorothy K. O'Neill Foundation** awarded a \$100,000 grant toward the purchase of a *Triceratops* skeleton for a new permanent dinosaur exhibit.

**Giant Eagle** awarded \$3,000 toward educational programming associated with *Humans: A Field Guide*.

A \$5,000 grant from the **Ford Motor Company** will benefit the Smead Discovery Center.

**The Alcoa Foundation** renewed its support of Cleveland Metropolitan School

District enhancement programs with a grant of \$20,000 for the 2007-'08 school year.

**The Native Plant Society** contributed \$500 to the Future Scientists program.

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)

Anonymous (1)  
Mrs. William W. Baum  
William and Eleanor McCoy

### Linnaean Phylum (\$7,500-\$9,999)

Dr. Nancy-Clay Marsteller

### Linnaean Class (\$5,000-\$7,499)

Heath and Sylvia Oliver

### Linnaean Order (\$2,500-\$4,999)

Barbara Brown and Steven Ward  
William and Phyllis Gunton  
Mrs. Jane E. Kilroy  
Robert and Gretchen Larson  
Hugh and Gretta Pallister  
Miriam Greek Smead  
Robert and Florence Spurney

### Linnaean Family (\$1,500-\$2,499)

William and Cora Lee Dice

Katherine S. Ingalls  
Mrs. Emma S. Lincoln  
John F. Smith

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 Heron (\$10,000-\$24,999)

Alcoa Foundation

### Corporate Fellow (\$5,000-\$9,999)

Ford Motor Company  
The Leiden Cabinet Company

### Corporate Benefactor (\$2,500-\$4,999)

Giant Eagle

### Corporate Patron (\$1,500-\$2,499)

NACCO Industries, Inc.

### Corporate Contributor (\$1,000-\$1,499)

Neighborhood Progress, Incorporated  
Patagonia, Inc.

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

# Explore the Museum to a different beat

A noteworthy collaboration has resulted in music for each of the Museum's galleries.



Seven pieces composed by CIM students for each of the Museum's galleries premiered at a special December concert.

Expand your musical horizons on your next Museum visit. Thanks to "Natural Melodies: Creating a Noteworthy Arrangement," a collaboration between the Museum and Cleveland Institute of Music, each of our galleries now has its own music. These pieces were composed by seven students in CIM's Composition Department who were selected by department head Margaret Brouwer.

After receiving an in-depth behind-the-scenes tour from Museum Executive Director Dr. Bruce Latimer, the students went to work. Their original compositions were recorded by CIM student musicians in the school's studios. They were also performed live at a special concert at the Museum last December.

- Jeremy Allen wrote "Cuyahoga Creatures" for the Ralph Perkins II Wildlife Center & Woods Garden. It reflects the playful, majestic native Ohio animals in this outdoor exhibit area and the endless possibilities of color, movement, excitement and beauty they offered.
- Michael Bratt composed "Cosmos" for Reinberger Hall of Astronomy. This electro-acoustic piece is a musical description of a celestial body moving toward the listener and passing by. The music is intense and detailed when close, prolonged and stretched as it moves away.
- Alexandra T. Bryant wrote "Iridescence" for Wade Gallery of Gems & Jewels. This piece for string quartet is simple, yet reflects the brilliant, glistening nature of the exhibits with harmonics, trills and arpeggios.
- David Kim composed "Adaptation" for Sears Hall of Human Ecology. This

piano composition is a reflection on the concept of evolution. Pitches and rhythms are transformed to become new ideas revolving around motifs.

- Mark Nowakowski was inspired to write "A Song for Lucy" by the famous cast of Lucy on display in Kirtland Hall. The piece reflects on the immensity of the natural world and humans' role in it as joyful and optimistic stewards.
- Matthew Smith wrote "Origins" for Reinberger Hall of Earth and Planetary Exploration. This piece for trombone quartet moves from the birth of the universe to the formation of planets by focusing on the idea of something being created out of nothing.
- John Thompson composed "Candles of Corpses" for the Ohio Archaeology Burial Mounds exhibit and titled it after one of J.R.R. Tolkien's books. This sonorous, contemplative piece explores the concept of death and how ancient cultures interpreted it. The students' music has been incorporated into the Natureguide Audio Tour, which offers in-depth information about the Museum's galleries on iPods that can be rented at the Admissions desk (members can use them for free, nonmembers must pay \$2). The music is also available for download from [www.cmnh.org](http://www.cmnh.org) and [www.cim.edu](http://www.cim.edu). A recording of the compositions, complete with the artists' statements about their inspiration, are available on CD for purchase in the Museum Store and CIM Music Store. Starting in January, receive \$2 off admission when you download the gallery music onto your MP3 player and bring it to the Museum (one discount per MP3 player only).

## Music for the Natural Areas

Local composer, singer and Cleveland Institute of Music faculty member Lisa Rainsong has regularly attended Museum field trips for the past year and a half. In that time, she developed a particular fondness for the Museum's Grand River Terraces Preserve. The avid birder and Museum Naturalist Certificate Program participant was so inspired by her experiences at the Terraces that she decided to write music about them.

Rainsong and five other musicians will present the piece that resulted, titled "Grand River Terraces," and five more of her nature-inspired compositions at Notes from Nature: A Concert for the Natural Areas on Sunday, January 27. All have agreed to perform *pro bono*.

"Grand River Terraces," a four-movement flute sonata, will feature Linda White on flute and Denella Sing on piano. Each movement is a musical depiction of a scene at the Terraces. This will be followed by performances of Rainsong's "This Grand Show is Eternal," a composition for soprano, flute and piccolo; "Do Not Sorrow" for soprano and flute; and "Robins Singing in the Dark" for soprano, flute and piccolo. Cleveland Music School Settlement instructor Allison Ballard will play piccolo.

Rounding out the program will be the premiere of "Baby Bobolinks," for which Rainsong and White will be joined by Erik Mann, professor at CIM and Edinboro University, on classical guitar and Kathleen Horvath, assistant professor of music education at Case Western Reserve University, on double bass. Guests will also enjoy the premiere of a new piece Rainsong composed for Director of Conservation and pianist Dr. Jim Bissell.

Rainsong will discuss each piece — its origins and musical themes — as part of the evening. All concert proceeds will benefit the Natural Areas Program. For more information and ticket prices please see this issue's *Inside Tracks* section.

Tracks is published bimonthly by The Cleveland Museum of Natural History  
1 Wade Oval Drive, Cleveland, Ohio  
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# Tracks

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U.S. Postage  
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Cleveland, Ohio  
Permit No. 2831

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## What is a human?

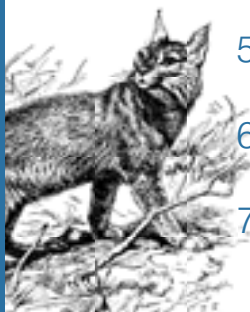
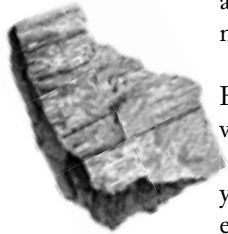
The Museum-produced exhibition *Humans: A Field Guide* addresses that question.

Most of us get up in the morning, stand on our two feet, dress, grab breakfast (or at least a cup of coffee) and never give a thought about the uniqueness of what we're doing. From a human perspective, these physical tasks are mundane. But from an evolutionary one, they are extraordinary, the result of millions of years of adaptation that has made us unique in the animal world.

The Museum-produced exhibition *Humans: A Field Guide*, on display in Kahn Hall through April 27, delves into what makes our species so distinctive. It begins with a look at life in general, then progresses through more specific traits.

As you walk through the exhibition, you're posed the following questions. Can you answer these? Cover the answer key to test your knowledge. Then visit the exhibition to learn more.

1. How are you like a rock?
2. How are you different from a house plant?
3. How are you different from a beetle?
4. How are you like a snake?
5. How are you like a bobcat?
6. How are you like a chimp?
7. How are you like your early ancestors?



### Answer Key:

1. All living and nonliving matter in the universe is composed of the same protons, neutrons and electrons.
2. Plants harness the Sun's energy to make their own food through photosynthesis. Humans and other animals must get their food from outside sources.
3. Insects and many other invertebrates have an external skeleton, while the bodies of humans and other vertebrates are supported from the inside.
4. Both you and the snake have backbones. This complex bony structure supports your body and protects your spinal chord.
5. We're both mammals. We are hairy animals (some hairier than others) whose young are fed with milk secreted by special glands of the mother. A long period of development allows the young to learn from the experience of elders.
6. The DNA of humans and chimpanzees is nearly 99 percent identical. We both exhibit complex social behavior and the ability to use tools.
7. Only *Homo sapiens* and their extinct ancestors, those of the early *Homo* and *Australopithecine* genera, exhibit the structural characteristics necessary for consistent upright walking: the S-curve of our spinal column, enlarged lower limb joints, arched feet and a wide, saddle-shaped pelvis.