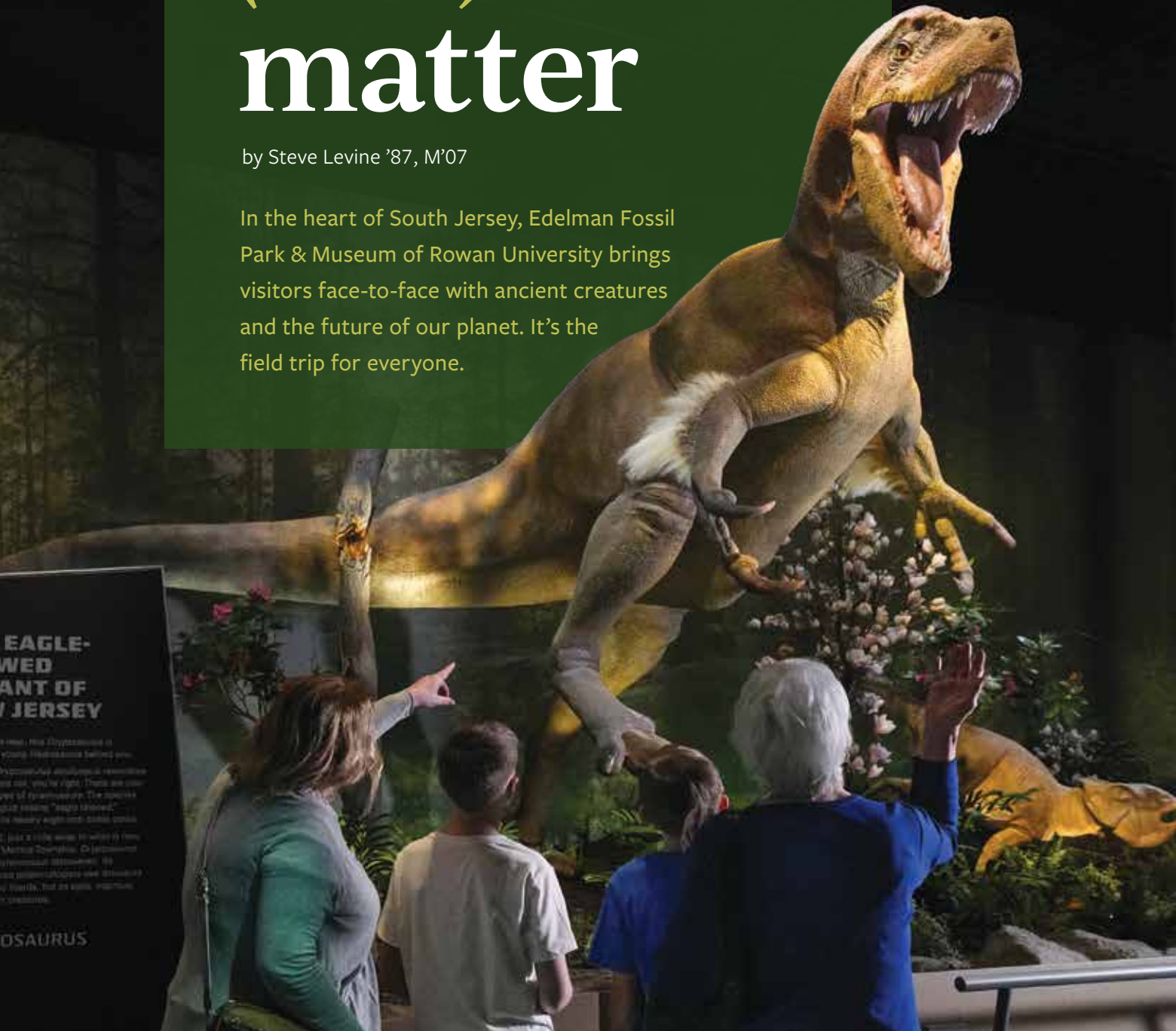


Why dinosaurs *(still)* matter

by Steve Levine '87, M'07

In the heart of South Jersey, Edelman Fossil Park & Museum of Rowan University brings visitors face-to-face with ancient creatures and the future of our planet. It's the field trip for everyone.



Nine-year-old Henry Bain counted down what seemed like a forever wait on a bright spring morning until he could step into what Smithsonian Magazine called one of the world's most anticipated museums: Jean & Ric Edelman Fossil Park & Museum of Rowan University.

"This is such a special day," he said. His smile and tone of voice made clear both the thrill and serious business of being one of the museum's first guests.

BIG DAY At the museum's public opening in March, young visitors join in the ribbon-cutting with Founding Executive Director Kenneth Lacovara (in cap), University President Ali A. Houshmand, benefactors Jean and Ric Edelman, Managing Director Kelly Stoetzel and Mantua Township advocate for EFM, Michelle Bruner.



Henry's encounter with ancient Earth history at Edelman Fossil Park & Museum (EFM) happened because of another day 66 million years ago when a giant asteroid tore through space and slammed into Earth. The catastrophe triggered earthquakes, tsunamis and wild swings in temperature that incinerated and then froze the planet, wiping out the dinosaurs and nearly all other life.

Eons later, just a few miles from Rowan's Glassboro campus, life-sized sculptures of the lost creatures loom over visitors in EFM galleries that depict the last days of the Cretaceous period, the heyday of the dinosaurs and their verdant prehistoric environment.

For Henry and the thousands of children and adults who've visited since it opened in March, EFM opens the door to discovering the past, understanding the present and taking action to improve the future.





PHOTO: EDELMAN FOSSIL PARK & MUSEUM

KEEPING IT REAL An Astrodon stomps on the throat of an Acrocanthosaurus. “At EFM, the dioramas are designed to show the gritty underbelly of the dinosaur world. We want to portray them as authentic beings that had their own triumphs, challenges and tragedies. These creatures were real and we want to tell their stories,” said paleontologist Kenneth Lacovara.

We need to understand how the dinosaurs lived and, most importantly, how they died, because it offers incredible lessons for us in the preservation of our planet and the sustainability of our own species.

—Ric Edelman



WHAT'S REALLY OVERHEATING THE PLANET?

In the Hall of Extinction & Hope, visitors explore past extinctions and today's climate crisis. A gesture-controlled interactive lets them test natural and human-caused factors—like volcanoes, solar cycles and fossil fuel consumption—and discover that greenhouse gases are the true driver of planetary overheating.

Investing in life lessons

The museum, made possible in large part through a \$25 million gift from Jean '81 and Ric '80 Edelman, continues the couple's generous commitment to STEM (science, technology, engineering and math) education, which includes Edelman Planetarium on the main Glassboro campus. “Ric and I love science and we love to get children excited about science,” said Jean, leading up to the museum's opening. “We knew that this was the right thing to do, to make this investment.”

Inside and out, the museum provides a look at Earth's history with a keen eye on the planet today, in particular the worsening climate and biodiversity crises. EFM also looks forward, presenting original videos and digital interactives

created to show how everyone can advocate for the environment and push back on climate change.

“We need to understand how the dinosaurs lived and, most importantly, how they died,” said Ric Edelman at the museum's ribbon-cutting, “because it offers incredible lessons for us in the preservation of our planet and the sustainability of our own species.”



This is the best window in the world into the pivotal moments that wiped out the dinosaurs.

—Kenneth Lacovara

From mining marl to discovering die-off

The spectacular facility is a \$75 million investment at the center of a 123-acre tract in southern New Jersey's Mantua Township, minutes from Philadelphia. There, in several acres mined for marl for more than 100 years, workers, students, researchers and visitors have unearthed fossils, from large aquatic reptiles like sea turtles and mosasaurs—which grew as big as a school bus—to dime-sized invertebrates and prehistoric sharks' teeth.

EFM Founding Executive Director Kenneth Lacovara '84, a Rowan alumnus and world-renowned paleontologist, had discovered dinosaurs around the globe, including *Dreadnoughtus schrani*, one of the largest known specimens, in Argentina, and *Paralititan stromeri* in Egypt. Back in South Jersey behind a suburban shopping center, he excavated, led scientists and volunteers working at the old quarry, and taught school and community groups who visited.



EYES ON DETAILS

In Collections & Conservation, Michael Heierbacher demonstrates the meticulous work of cleaning, stabilizing and repairing specimens. The EFM collection includes more than 100,000 fossils representing more than 100 species found on site, plus donated collections from John and Joan Wolf, and others.

PHOTO: EDELMAN FOSSIL PARK & MUSEUM



PHOTO: EDELMAN FOSSIL PARK & MUSEUM

SITE-SPECIFIC Young explorers, above, search for 66-million-year-old fossils. “When they find a fossil, they are the first person to see it; they are the first person to know something,” said Lacovara. “It’s a real discovery and they become authentic explorers.”

A life-sized reconstruction of an extinct crocodile, *Thoracosaurus neocesariensis*, right, is based on a 25-foot skeleton unearthed in the quarry by Lacovara and his team. Renowned paleoartist Gary Staab sculpted this and more than 50 full-scale reconstructions for EFM galleries. Each is set in an immersive diorama, complete with accurate plant life, dynamic lighting and a soundscape that transports visitors to a vanished world.

The museum (opposite, left) overlooks the quarry and the pumphouse that keeps groundwater from flooding the dig site.



When the mining company ceased operation, the quarry and its globally significant paleontology research site were in jeopardy. Knowing the magnitude of such a loss to science and having dreamt of building a facility that would educate and inspire generations of students and citizen scientists, Lacovara worked with local officials to preserve the land that Rowan eventually purchased.

“As it turns out, this is the best window in the world into the pivotal moments that wiped out the dinosaurs,” he said. “I’ve researched the world to find a site that would provide proof of the mass die-off, only to find it in my backyard, behind a Lowe’s Home Improvement store in Mantua Township.”



LEARN AT EVERY TURN

EFM galleries are packed with discovery for all ages—kid-friendly content down low, deeper dives higher up for grown-ups. It’s a place where kids become confident experts and adults rediscover their inner child. With hands-on fun, awe and wonder throughout, there’s something for everyone to enjoy.



MEET MABEL THE MAMMAL!

In 10 playful mini-dioramas made just for little ones, Mabel the Mammal struggles to bake, paint—even hang a disco ball—while dinosaurs stomp overhead. But after a big bang one day, Mabel finds the world is hers. The Age of Mammals has begun!

PTEROSAUR PTERRACE

EFM's one-of-a-kind paleontology-themed playground is free to the public.



MORE TO EXPLORE In addition to three major exhibit galleries, EFM includes hands-on Discovery Forest and Critter Cove live animal center, plus Expedition Voyager VR Experience, the Quarry Dig experience, nature trails and more. Guests can drop in at Darwin & Co. museum store, lower right, for science-themed apparel, gifts and books, and Quarry Grounds Cafe, for freshly roasted coffee and light bites. The cafe and shop are open to the public without admission to the museum.



A world of wonder

With repeatedly sold-out admission, international news coverage and architectural awards for design, it's clear that Smithsonian Magazine's enthusiasm about Edelman Fossil Park & Museum was well-founded.

In addition to the galleries with dinosaur sculptures and specimens found on site, EFM features an indoor fossil hunt that uses Explorer Keys (technology-enhanced ID cards) that allow visitors to track their discoveries and reveal fun facts as they explore. More inside and out adds to guests' experience, including a live

animal exhibit, a free-roaming virtual reality expedition, plus a museum store, cafe, theater, nature trails and a paleontology-themed playground.

In the quarry just outside the museum, visitors can still dig for fossils and take home their finds, as well as observe Rowan scientists at work in the area dedicated to paleontological research.

Going back to the beginning usually is essential to problem-solving and propelling progress, which Rowan University President Ali A. Houshmand reflected on during the museum opening.

TOOTHY TERROR

The ultimate apex predator of the ancient seas was not a dinosaur, but a massive marine lizard stretching up to 55 feet, with paddle-like limbs, a six-foot jaw and a second set of backward-pointing throat teeth to trap prey. During the Cretaceous, the museum site was underwater—and mosasaurs swam where this model hangs today.





PHOTO: EDELMAN FOSSIL PARK & MUSEUM

“Soon enough, school buses full of excited students will pull up to this magnificent facility,” Houshmand said to hundreds gathered on the veranda overlooking the quarry. “Those very same students will eventually make their way to Rowan and other leading research universities. Some will pursue degrees in STEM disciplines, but also in business, education, arts and humanities.

“One of our primary responsibilities as a research institution is to foster exploration and keep our country at the forefront of science and technology. We will continue to do so by attracting and training the next generation of scientists and engineers—now with Edelman Fossil Park & Museum to encourage young explorers to dream and discover. It’s extraordinarily exciting to think of that cycle repeating itself year after year.”

DISCOVER THE PAST. PROTECT THE FUTURE.

The Fifth Extinction Wall, above, captures the dramatic story of the asteroid impact that ended the age of dinosaurs—featuring both victims and unlikely survivors.

At the Act Now! kiosks, right, visitors discover practical ways to help build a more sustainable future.

In Discovery Forest, lower right, young explorers uncover an Ice Age treasure: a woolly rhino jaw.

Wide-eyed visitors meet a lively cast of real animals in EFM’s Critter Cove, below.

