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WMU Department of Geological
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Dinosaur Park: The Multi-purpose Geological Platform at Western Michigan University

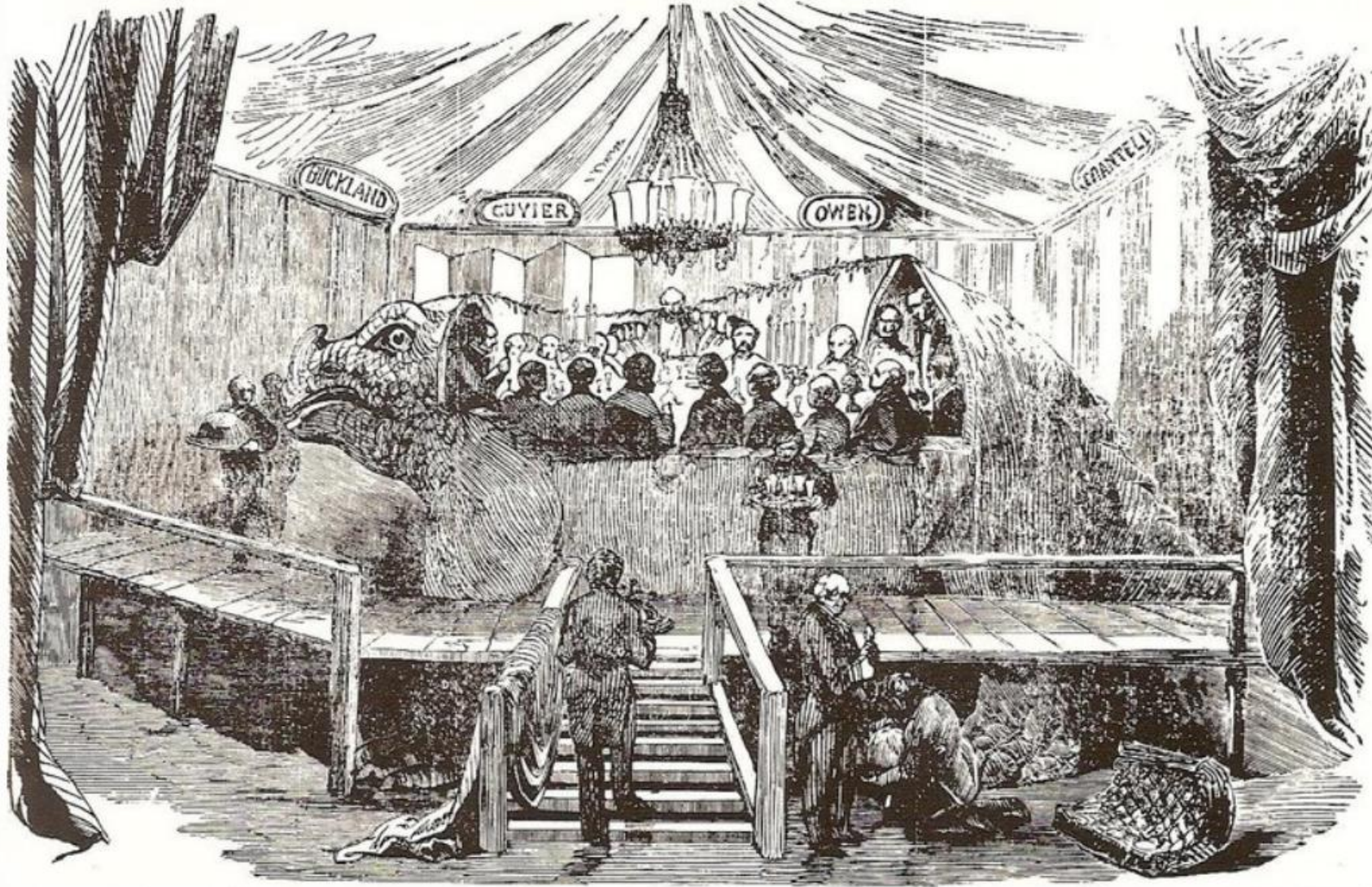
WESTERN MICHIGAN UNIVERSITY

GEOLOGICAL & ENVIRONMENTAL SCIENCES

THE POWER OF SCIENCE AND IMAGINATION WORKING TOGETHER



Dinosaurs Have Captured the Imagination of the Public for Close to Two Centuries



NEW YEAR'S EVE - 1853

A group of scientists, businessmen, and newspapermen sat down to dinner inside a life-sized Iguanodon model. It was one of the first reconstructions of a dinosaur ever made, and the dinner was a publicity stunt that helped launch an incredibly successful craze: our obsession with dinosaurs.

Even the word "dinosaur" was new—invented by one of the dinner's attendees in 1842; Richard Owen was a paleontology pioneer and the dinner's guest of honor.

The guests enjoyed a fabulous dinner in and around the Iguanodon. **THE LONDON ILLUSTRATED NEWS/PUBLIC DOMAIN**

Our Integrated Outreach Platform

- ▶ On-campus – the Lloyd Schmaltz Geology and Mineral Museum and Rock Garden – tours - now includes Dinosaur Park
- ▶ Michigan Geological Repository for Research and Education – off-campus home of the Michigan Geological Survey – tours, professional training (teachers workshops and professional geologists workshops)
- ▶ CoreKids program – external outreach activities – school visits, booths at allied partner events (other Museums, mineral shows, etc.)
- ▶ Developing integrated approach – outreach on and off campus
 - ▶ Reaches 20,000+ people per year – K-13 students, teachers, parents, professionals



Teachers at a MGRRE-hosted workshop exploring rock porosity and permeability.



WESTERN MICHIGAN UNIVERSITY

Core Kids

MGRRE's K-12 Earth Science Outreach Program



Topics:

- Geology and Geologists
- Michigan Geology and Natural Resources
- Rocks and Minerals
- Water Resources
- Petroleum Geology
- Sands, Beaches and Coastlines
- Climate Change



Real geologists from
Western Michigan University
who talk to students and answer
their questions

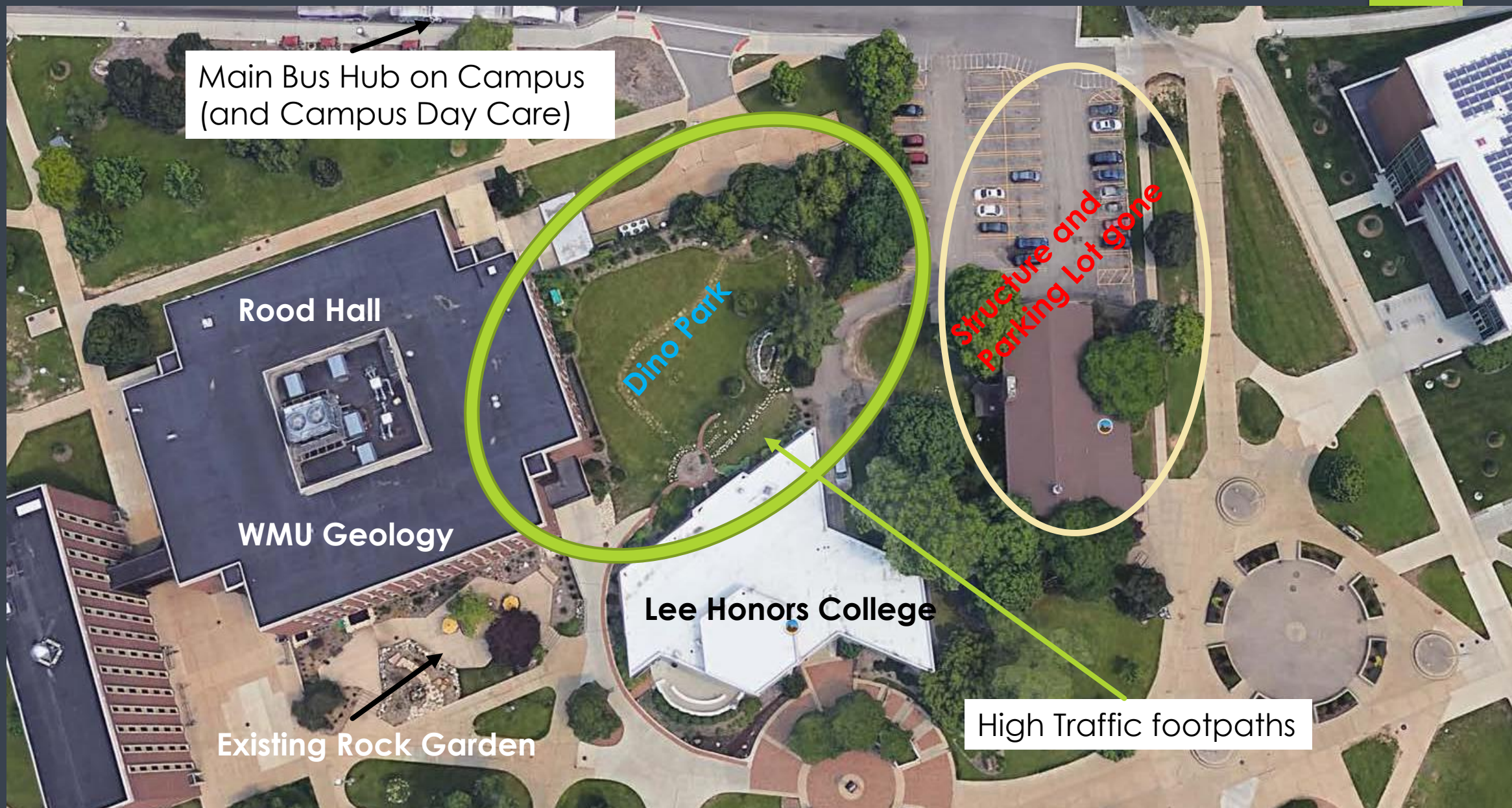


Website with lesson plans and other
resources for teachers, students and parents

www.wmich.edu/corekids

Dinosaur Park – lessons learned

- ▶ Ensure community buy-in – discussions with other departments sharing site (Physics, Math, Statistics and Lee Honors College)
- ▶ Work with University bureaucracy – Landscaping and facilities management, higher administration in college (critical groups to have on board)
 - ▶ A lot of planning – site access, landscaping, campus planning, financing projects, etc.
- ▶ Everything is much more expensive than planned!
 - ▶ Lighting
 - ▶ Security (Cameras)
 - ▶ Future landscaping costs – how to keep site low maintenance
- ▶ Large sculptures – difficult to find space big enough for storage



Main Bus Hub on Campus
(and Campus Day Care)

Rood Hall

WMU Geology

Dino Park

Structure and
Parking Lot gone

Lee Honors College

Existing Rock Garden

High Traffic footpaths



Existing Landscape to Remain
Edge of Building Below, Typ.

Triceratops
Raptor

Spinosaurus

ROOD HALL

Brachiosaurus

Stegosaurus

Parasaurolophus

LEE HONORS COLLEGE



Overall Plan

Currently have a few dinosaurs installed – will be moving into Phase I hopefully this summer



Phase I:

- 1) Remove/relocate existing exterior lighting as needed for proposed work.
- 2) Remove existing sprinkler heads and reinstall new heads for new proposed work.
- 3) Install new concrete sidewalk at existing walking path between Sangren Hall and Rood Hall.
- 4) Install concrete pads for future dinosaur sculptures. (cost-savings measure)
- 5) Install conduit under all proposed paths for future lighting and irrigation work.
- 6) Relocate existing copper boulder to parking-lot entrance of Rood Hall.



Phase II:

1) Install new lighting and electrical lines for security and highlighting dinosaur sculptures.

► 2) Install security cameras/system.



Phase III

Remove existing topsoil/sod – Install new aggregate paths, new topsoil and plantings, Reshape topography for rain gardens



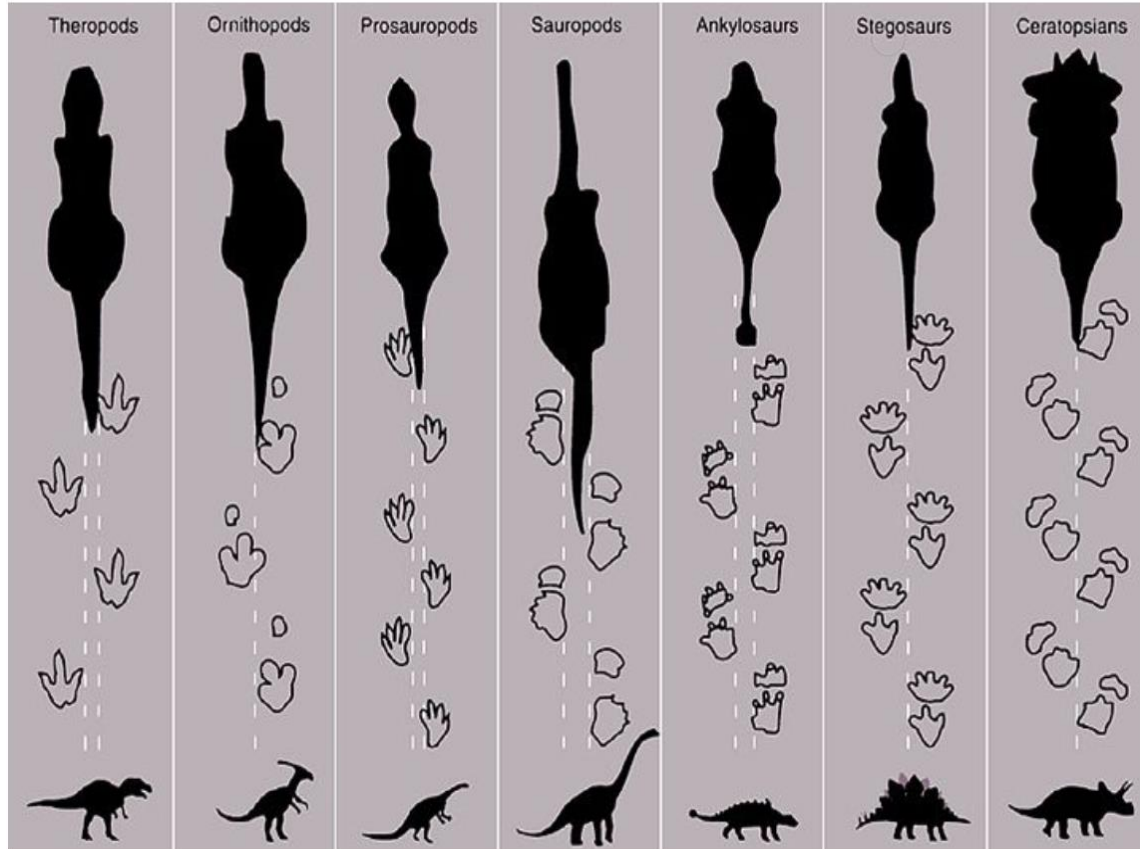
LOW MOW TURF



Phase IV:

- 1) Install *Spinosaurus* and *Parasaurolophus* sculptures.
- 2) Install Raptor Nest and 3D printed eggs.
- 3) Install footprint stepping stones in pathway.





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WARNING
BEWARE OF RAPTOR



Phase V:

- ▶ 1) Install Brachiosaurus sculpture.
- ▶ 2) Install interpretive signage.
- ▶ 3) Install additional landscaping (prickly plants) and fencing around all dinosaur sculptures for aesthetics and security.



SIGNAGE



**Western Michigan University
College of Arts and Sciences**

**Department of
Geological and Environmental Sciences**



**WARNING
DO NOT FEED
THE DINOSAURS**

QR SCAN CODE



The Importance of Signage



We did not do “Dinner in an *Iguanodon*” –
but instead – “Movies with a *Stegosaurus*”

Promotional Materials

2018 Department Newsletter

Department Booth at National GSA 2018

Jurassic World 2 Movie Night with the
Dinosaurs



The nation's **longest** running
HYDROGEOLOGY FIELD COURSE!

WESTERN MICHIGAN UNIVERSITY
Department of Geological and Environmental Sciences
wmich.edu/geology



NEW DINOSAUR PARK!

Graduate Certificate Program in UAVs Applications

Western Michigan University is now offering a nine credit hour certificate in the geological and environmental applications of unmanned aerial vehicles (UAVs). The certificate program is being offered jointly by the Department of Geological and Environmental Sciences and the College of Aviation.

This event is cosponsored by the Department of Geological and Environmental Sciences and the Campus Activities Board

JOIN US FOR AN OUTDOOR
MOVIE EXPERIENCE IN
The Department of Geological and Environmental Sciences newly created
DINO PARK

FEATURING: JURASSIC WORLD - THE FALLEN KINGDOM
WEDNESDAY, SEPT. 19, 7:40 P.M.
FREE ADMISSION!



MOVIE NIGHT DETAILS

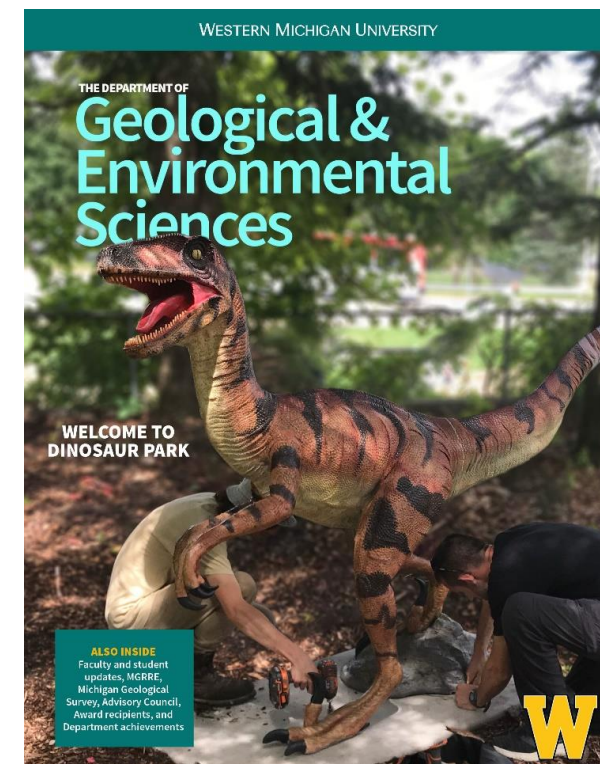
Be the first to see and experience life-size dinosaurs in the newly created dinosaur park! Come face-to-face with a Stegosaurus, Triceratops, and a Utahraptor all while enjoying an outdoor movie experience! Bring a chair or blanket and enjoy the show! This event is open to students, faculty, and staff and is free of charge.

Wednesday, Sept. 19 at 7:40 p.m.
Dinosaur park located outside of Rood Hall
This event is open to WMU students, faculty, and staff
For more event information, visit wmich.edu/geology/events

W **CAB** **f** **in** **u**

WESTERN MICHIGAN UNIVERSITY

THE DEPARTMENT OF
Geological & Environmental Sciences



WELCOME TO DINOSAUR PARK

ALSO INSIDE
Faculty and student updates, MGBRE, Michigan Geological Survey, Advisory Council, Award recipients, and Department achievements

W

Conclusions

- ▶ Fun way to increase visibility of Geological and Environmental Sciences to the rest of campus
- ▶ Provide alternate facility to Museum to enhance on-campus outreach (summer camps, daily visitors)
- ▶ Required much leg-work – had to have department approval, followed by several administrative units on campus
 - ▶ Funding challenges – donations, student course fees, other department funds
 - ▶ Part of long-term rejuvenation of the Lloyd Schmaltz Geological Museum

We would like to acknowledge
the following people:

Rachel Hughes-Nilsson

O'Boyle, Cowell, Blalock & Assoc., Inc.

350 E. Michigan Avenue, Ste 415, Kalamazoo, MI 49007

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WESTERN MICHIGAN UNIVERSITY
Facilities Management

Drs. Mohamed Sultan, Carla Koretsky
and Heather Petcovic



and:
PEOPLE LIKE YOU

Our second *Utahraptor*

Currently hanging out in our Minerals and Rocks
Lab room with the students until spring!



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