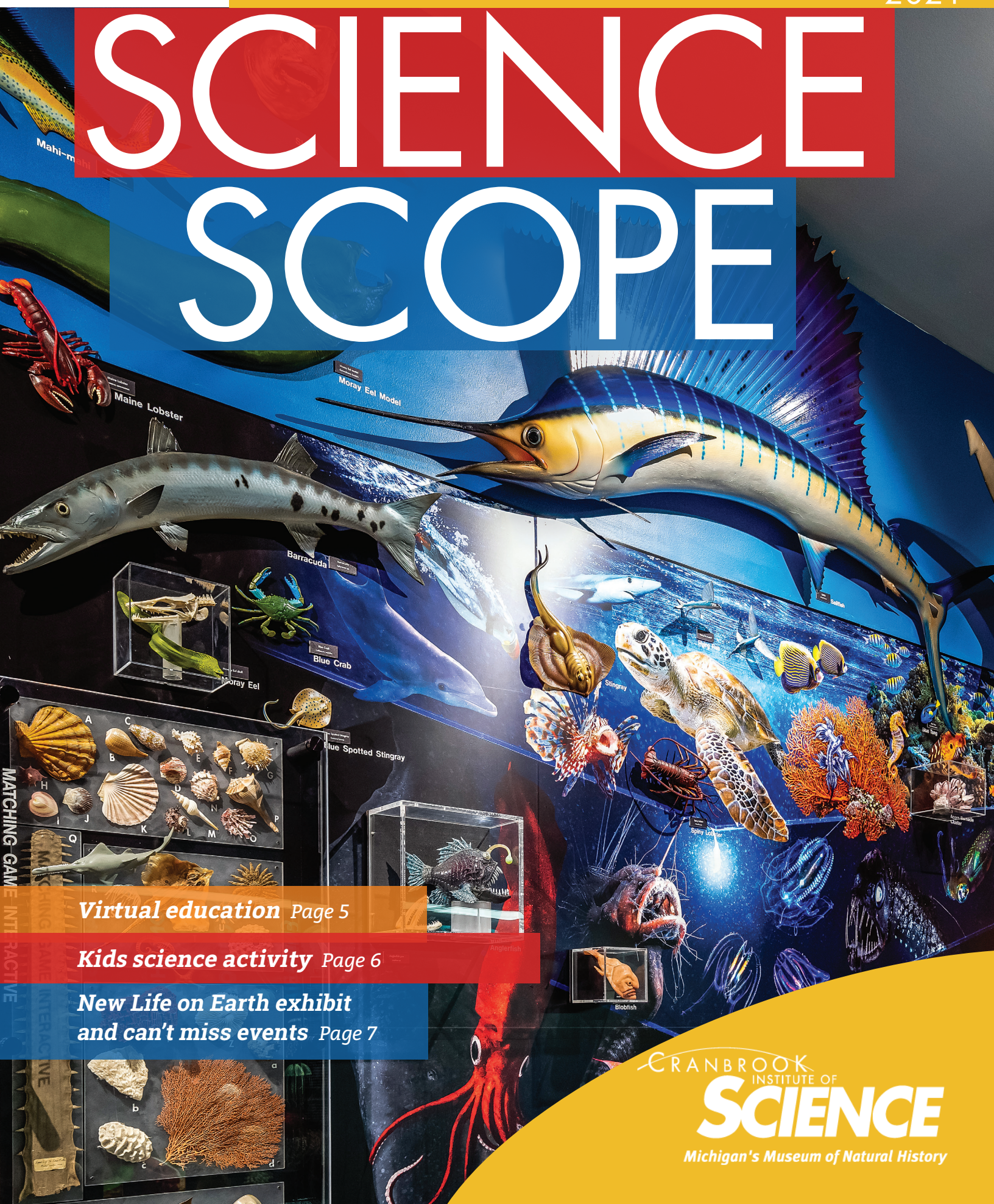


WINTER
2021

SCIENCE SCOPE



Virtual education Page 5

Kids science activity Page 6

**New Life on Earth exhibit
and can't miss events** Page 7

CRANBROOK
INSTITUTE OF
SCIENCE
Michigan's Museum of Natural History

SCIENCE
WILL
ALWAYS
BE
HERE.

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FIELD NOTES

Dear Members and Friends of the Institute,

I hope all of you and your families enjoyed a safe and healthy holiday season. Although it was likely very different than what we're all used to, I hope you found time to connect, celebrate, and enjoy interacting with family and friends.

Now that the holidays are past, I find myself living very much in the moment. Each day presents a new set of exciting opportunities for the Institute, and a few challenges. But the glimmers of hope brought by the first doses of a vaccine have my mind looking very much forward to the days and weeks to come.

So what's next for the Institute? Before we get to that, I'd like to share a bit about what's already happened at *Michigan's Museum of Natural History* over the past six months. Some of what's been accomplished might even come as a surprise to you and testifies to the dedicated, hardworking staff that are part of YOUR Institute. A few highlights include:

- > Successfully implementing a wide range of COVID-related protocols, allowing the Institute to safely reopen to physical guests, in limited numbers, this past August;
- > Effective transitioning of our many K-12 programs to a virtual context beginning this past September;
- > Renewal of the majority of our educational programs for underserved audiences, including service to Detroit Public Schools Community District, Flint Community Schools, and the School District of the City of Pontiac with digital science programming this year.
- > Completion of our most successful Women Rock Science event to date, which grossed more than \$250,000 towards supporting the Institute's programs to underserved audiences;
- > Completion of the new *Life on Earth* permanent exhibition in the Institute's Wasserman Hall, replacing the outdated *Reading Objects* installation;
- > Initiation of our first members-only virtual lecture series in November of 2020;
- > Significant work and progress on the Institute's first self-produced dome theater show, "The Great Lakes Effect."



These are but a few of the projects the Institute's committed staff have been working on since the end of summer and much more is yet to come! Some of what's to come includes the continuation of our member's-only digital lecture series (watch for my talk on coral reefs in April!), full and robust summer camp programming for kids of all ages, the opening of a nationally-recognized astronomy exhibition this coming fall, and the first steps towards an Institute-produced, permanent exhibition on climate change.

I have great confidence that as we go through the coming weeks and months, a gradual trend towards a full reopening of the Institute will slowly emerge. What's never left, however, is the commitment of the Institute and its staff to offering the highest-quality experiences in science exploration to you and your family. In this surreal period of uncertainty, let the Institute be a stabilizing force for you and yours. We are here to serve you, keep you safe when you visit, and, as always, be the trusted science resource for Michigan and beyond that we have been for more than eighty years.

I hope to see you soon!

Go Science,

Michael Stafford, Ph.D.
Director

REMEMBERING JOHN ZAWISKIE

CURATOR OF EARTH AND LIFE SCIENCES AT CRANBROOK INSTITUTE OF SCIENCE FOR MORE THAN 20 YEARS



From entertaining and making families laugh as Dr. Kelp, to educating guests and students about dinosaurs, meteorites, and geology, John Zawiskie's energy and passion for his work was contagious. He will forever be missed by his family, friends, colleagues, students, Institute of Science guests, and everyone that knew him.

In addition to his role at the Institute of Science, he was an adjunct member of the faculty of the Department of Geology at Wayne State University. He was a colleague, mentor, teacher, and friend - and will forever be a legend within the department.

John was a fixture at Cranbrook Institute of Science since he first arrived on campus in 1996. He was the mastermind behind many of the Institute's popular dinosaur exhibitions during his tenure, serving as both a curatorial and content expert. When he wasn't at the museum or Wayne State, he could be found in the field - he spent time conducting geological and climate change research in Antarctica, South America, Australia, and the American Southwest. His research and field work focused on the geology of the Great Lakes, mastodons, Ice Age fauna, meteorites, and so much more. Many of his findings were published in academic journals, and his Great Lakes research was even featured in an episode of the show, "How the Earth was Made," on the History Channel.

John was widely respected in his field, and had the remarkable ability to turn complex ideas into easy-to-understand programs and experiences for children and adults, alike.

"John Zawiskie and I were colleagues and friends for more than 20 years. He was a unique blend of a scientist and educator, and was a passionate advocate for the natural world. John's contributions to the Institute were immense, and his passing leaves a void for all of us who knew him and admired his talented, generous spirit."

> Michael D. Stafford, Ph.D., Director of Cranbrook Institute of Science

Cranbrook Institute of Science has established a fund in John's name:

> Gifts made in memory of John will be placed in the John Zawiskie Memorial Fund to support Earth Science at Cranbrook Institute of Science. Donations can be made at science.cranbrook.edu/support/donate; donors should indicate, "In Memory of John Zawiskie," in the comments section when making an online gift.

Memorial donations are also encouraged to the ALS Association, Michigan Chapter.

"On behalf of the 250 members of the Michigan Mineralogical Society (MMS), we celebrate John Zawiskie's life. John contributed invaluable knowledge to MMS over the years. He was a frequent guest speaker, he set up many displays at the annual MMS show, he served as a consultant when we had technical questions, and he answered questions on a wide range of items - especially from people who thought they discovered the world's best meteorite! John had a great sense of humor, was very curious by nature, and loved to educate adults and children alike. His passing is a great loss to the scientific, curatorial, and educational communities of Michigan and we will miss him tremendously. We will hold his memory and support dear to our club's mission."

> Dave Lurie (President) and Brad Zylman (Vice President) of the Michigan Mineralogical Society

THANK YOU FOR YOUR SUPPORT



Here's what we heard from some of our Women Rock Science attendees:

"Amazing, amazing job. What an inspiring video with so many wonderful speakers. Really incredible!"

"Great work to all that put it together. I plan to do the experiments with my kids (STEAM loving daughter and son) this weekend."

Our third annual Women Rock Science gala looked different this year, as it was held virtually for the first time, but we are thrilled to share with you that together, **we were able to raise more than \$250,000!**

Funds raised go towards the Institute's "Service to Others" outreach initiatives, which fuels its mission of igniting curiosity in children in the areas of science, technology, engineering, arts, and mathematics; ensuring that more students develop essential skills that are needed to succeed in the 21st century.

And, as many of you are experiencing, in response to the COVID-19 pandemic, schools have shifted to virtual and hybrid models for learning. Women Rock Science funds will allow the Institute of Science to continue its commitment of providing science and natural history education to students and teachers both virtually and in-person.

Please visit our website and social channels for more information.

SAVE THE DATE!

The 4th annual Women Rock Science gala will take place on Thursday, October 7, 2021.

MEMBERSHIP PERKS

MEMBER EXCLUSIVE



VIRTUAL LECTURE SERIES

As a valued member of Cranbrook Institute of Science, we invite you to join us for our monthly, virtual lecture series!

Engage with industry experts and Institute of Science educators, participate in lively demonstrations and discussions, and learn something new about science and natural history.

Experiences and topics include, but are not limited to: Behind-the-scenes tours of Institute of Science exhibits, Native American history, coral reefs, shells, bugs, and so much more.

Please visit page 7 in Science Scope to learn more about our upcoming virtual lectures in March and April, and then head to science.cranbrook.edu to register!

NEW!

EXPLORE CRANBROOK MEMBERSHIP

With the all new, Explore Cranbrook membership, you can now visit four, world-class institutions in one location:

- > Cranbrook Art Museum
- > Cranbrook Center for Collections and Research walking tours (2 dates available, TBD)
- > Cranbrook Institute of Science permanent collections
- > Cranbrook House & Gardens' regularly scheduled tours

Please visit science.cranbrook.edu/support/membership to learn more.

Please note: The Explore Cranbrook membership does not include member discounts or reciprocal benefits when visiting other organizations.



INSTITUTE KIDS!

EXPLORE CAMPS - REGISTRATION NOW OPEN!

In-person camps

Join us for our on-site camps, where inquisitive campers learn through doing. Campers will work together to tackle activities, experiments, and investigations in a unique and safe environment. Topics include: Physics, geology, ecology, and more. Activities do not repeat - sign up for one week or more.

Virtual summer camps

Looking for a "science snack" at the end of summer? Join us virtually from your kitchen, backyard, or vacation spot. Topics include: The Science of Michigan and Science Goes to the Movies.



To learn more, and to reserve your spot today, please visit:
science.cranbrook.edu/explore/programs/summer-camp-2021

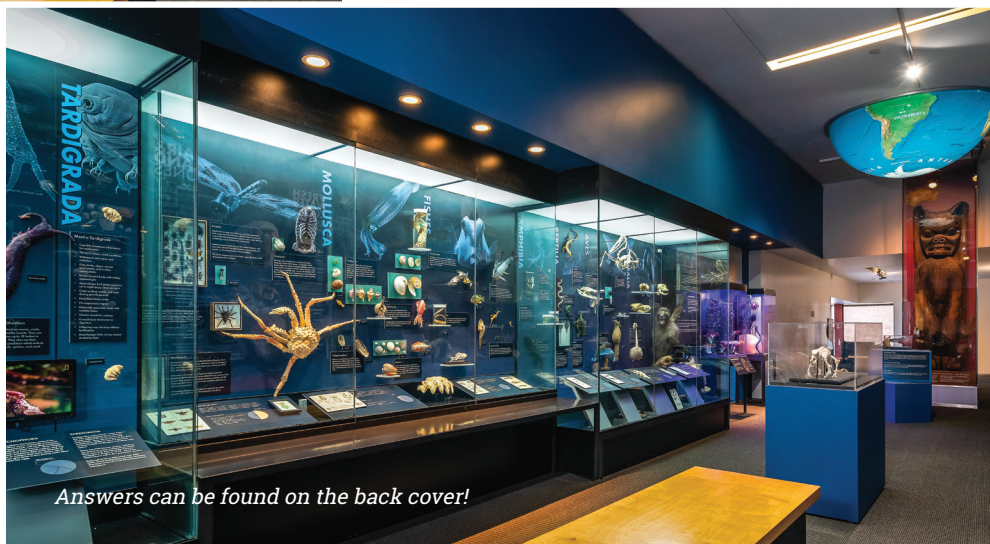
SPOT THE DIFFERENCE



CAN YOU SPOT THE DIFFERENCES?
HINT: THERE ARE 5 OF THEM.

These images are from our new, permanent exhibit: Life on Earth

**BELIEVE IT OR NOT,
THESE PICTURES ARE
NOT THE SAME!**



Answers can be found on the back cover!

SAVE THE DATE FOR THESE CAN'T MISS EVENTS

Join us for our member exclusive virtual lecture series! Once a month, we'll host a FREE program for adults and one for children and families.

Just visit science.cranbrook.edu to register.

A Conversation on Native American History

March 11 | 7:30pm

Join Cameron Wood, the Institute's Curator of Collections; Dr. Susan Sleeper-Smith, Professor of History at Michigan State University; and Colonel Rodney Thomas, noted authority on the history of the Plains Indian Wars, as they discuss their latest works and how gender roles have been presented in scholarship of Native Peoples.

In Like a Lion, Out Like a Lamb

March 13 | 9:00am

Let's talk spring! During this month's Saturday morning get-together we'll discuss the popular phrase, "in like a lion, out like a lamb," the spring equinox, warmer days ahead, and more sunlight. Then, let's talk about: Will there be snow on the ground? Will the sun be shining? Who's coming out of hibernation?

Trouble in Poseidon's House: The Global Decline of Modern Coral Reefs

April 8 | 7:30pm

Coral reefs are among our planet's most complex and fascinating ecosystems. Join Dr. Michael Stafford, Director of Cranbrook Institute of Science, for an informative and timely presentation on the natural history of these living creatures, composition, and what may be contributing to the decline of coral reefs around the world.

All About Shells

April 10 | 9:00am

Have you ever wanted to know if it's really the ocean you hear inside a shell? If so, we invite you to grab your shells, or pick some shells up from the Institute (quantities are limited), and through this interactive session, we'll learn all about these unique specimens, including shapes, textures, what lived inside, and more.

Need to renew your membership or not a member? We have you covered! Renew your membership or become a member today by visiting our website. We have tons of options that are sure to suit your family's needs.

Learn more about upcoming events, both in-person and virtually!

FOLLOW US ON:

Instagram @cranbrookscience and
Facebook @CranbrookInstituteofScience



LIFE ON EARTH

The Institute of Science invites you to visit its all-new, permanent exhibit: *Life on Earth*! This intricately designed exhibition is full of artifacts and specimens, engaging imagery, and tons of educational resources for everyone in the family, presenting the complexities of Earth's biodiversity. No matter the age, you will walk away learning something new!

Where did the idea for the *Life on Earth* exhibit come from? The *Life on Earth* exhibit classifies and organizes specimens using a system, Taxonomy, developed by Carolus Linnaeus, a Swedish naturalist, in 1735.

WHAT EXACTLY IS TAXONOMY?

It is an organized system used to classify and group living organisms based on biological features. In Linnaeus's 1735 book, *Systema Naturae*, his system outlined three distinct kingdoms: Animals, plants, and minerals. Each of these were divided into classes and further subdivided into orders, genera, and species.

Earth's ecosphere is divided into zones, and some of these zones are extremely inhospitable to life, yet are still home to organisms that thrive there. The *Life on Earth* exhibit will educate guests on all of these unique zones and features the most unusual organisms, like rock eating bacteria, parasitic worms, jellyfish, and rare pangolin, sometimes known as scaly anteaters.

This exhibit was created entirely in-house by Cranbrook Institute of Science exhibit experts and designers to help create a biodiversity experience for guests of all ages.

DO YOU KNOW THE DIFFERENCE BETWEEN DNA AND RNA?

Deoxyribonucleic acid, or DNA, is a molecule located in cells that contains information that an organism needs to live and reproduce. DNA is inherited and is located in a cell's nucleus. The role of RNA is to act as a copier of DNA. Ribonucleic acid, or RNA, works as a messenger for DNA, carrying information so that it can replicate and make more proteins.

Learn more about this topic and others in the new *Life on Earth* exhibit.

COVER PHOTO:
THE NEW LIFE ON EARTH PERMANENT EXHIBIT -
NOW OPEN!

EXPLORE THE NIGHT SKY WITH US



ACHESON PLANETARIUM

The health and safety of our guests is of the utmost importance. Once deemed safe to reopen, the *Acheson Planetarium* will be operating at limited capacity, and will be cleaned between each show.

When the planetarium does reopen, we invite you to discover the Universe around us in our state-of-the-art, 360-degree experience! Planetarium programs will be offered every Friday – Sunday.

Visit science.cranbrook.edu/visit/schedule to see what's playing when the planetarium reopens.

WHAT'S HAPPENING IN THE SKY?

March 14:

March (or vernal or spring) equinox begins for the Northern Hemisphere at 2:00am.

April 26:

View the first of three supermoons in 2021, otherwise known as the full Pink Moon.

May 4:

Watch the Eta-Aquarid meteor shower at its peak.

June 10:

The annular solar eclipse can be partially seen in Detroit beginning at 5:00am, maximum at 5:58am, and ending at 6:37am.

August 2:

Saturn is at opposition, otherwise known as its closest approach to Earth.