

APGO Education Foundation Releases Morgan's Point GeoHike on GeoscienceINFO.com

September 30, 2024, Toronto, Ontario: The APGO Education Foundation ("APGOEF") and the School of Earth, Environment & Society at McMaster University are pleased to announce the release of the Morgan's Point GeoHike, located on the south side of the Niagara Peninsula, in the Niagara Geopark (see Figure 1). This virtual tour features 8 stops that highlight an ancient ecosystem and modern geological processes. To see this as well as all our GeoHikes, visit <u>our GeoHikes page</u>.



Figure 1. Map of the Niagara Peninsula, showing the location of the Morgan's Point GeoHike (yellow marker).

Located in the Niagara Geopark, Morgan's Point is situated on a small peninsula extending southward into Lake Erie. This unique area offers an unprecedented opportunity to learn about the process of sand dune formation while visiting the dunes themselves (see Figure 1). When traversing the low-lying sandy hills of the Dune Trail, you will encounter fossilized evidence of a coral reef that grew in the area over 390 million years ago (Figure 2). Deep gouges and unusually large boulders on top of the fossilized reef paint a vivid picture of the last Ice Age, while close examination of the sand dunes in the area will demonstrate the many interactions that exist between biological and geological processes. All of these fascinating features are highlighted in our descriptions of each stop.



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Figure 2. An actively eroding sand dune at the Morgan's Point GeoHike.



Figure 3. A large boulder of the colonial rugose coral called *Acinophyllum*, found at the Morgan's Point GeoHike.

The Morgan's Point GeoHike was developed by the GeoscienceINFO team led by Manager Dr. Deana Schwarz, P.Geo., and the School of Earth, Environment & Society at McMaster University, led by Dr. Carolyn Eyles and Dr. Dan Dicks. It is part of a growing series of geoscience-based hiking tours released across Ontario that aims to enhance public knowledge of geoscience using a hands-on and virtually accessible approach. We plan to release more GeoHikes in 2024 and subsequent years, throughout Ontario.

GeoHikes are 1-3-hour non-intensive hiking tours on maintained trails in Ontario that highlight local geology and describe their geological and environmental significance. GeoHikes can be used as guides while walking the trail in person, or as a virtual alternative at home or in the classroom. Visiting sites in person is a great way to learn but virtual tours are also an exciting way to expand one's knowledge when in-person access is not possible. Through the use of ESRI's innovative ArcGIS-StoryMap[™] application and the integrated features, GeoHikes provide the user with an immersive experience. GeoHikes typically include:

- 360-degree photos and/or drone videos to provide a detailed overview of each site.
- LiDAR-based virtual 3D models that show locations of key features such as fossils, important structures and other geological features at the buildings or rock outcrops.
- Slide bars to show multiple images or overlays of important features or geologic information.
- Descriptions of geological features.
- Audio descriptions of written content.



About the APGO Education Foundation

The APGO Education Foundation ("APGOEF) is a registered charitable organization under the Canada Notfor-profit Corporations Act, registration number 84604 5052 RR0001.

The purpose of the charity is to advance the education of the public in the area of geoscience by:

- Holding lectures, presentations, and conferences on geoscience both in person and virtually to introduce geoscience to high school and university students as well as enhance the knowledge of the general public.
- Providing scholarships to post-secondary students for the study of geoscience in the final year of a Bachelor of Science (B.Sc.) degree program.
- Providing bursaries to immigrants to Canada who are internationally trained geoscientists and have demonstrated financial need for completion of licensure procedures for registration as professional geoscientists (P.Geo.s) in Ontario.

APGOEF provides funding to support innovative geoscience education projects working with university geoscience departments, community groups and not-for-profit organizations across Ontario. Please see our website at <u>https://apgoef.ca</u>.

<u>GeoscienceINFO.com</u> an innovative one-stop spot for the public for information about the earth beneath their feet. This new website provides interesting information on all facets of geoscience. A particularly exciting feature of <u>GeoscienceINFO.com</u> is the highlighting of virtual fieldtrips in different areas in Ontario. This enables viewers to experience and learn about the geology of an area while traversing it digitally in ESRI ArcGIS Online[™] and StoryMaps[™]. Information on the latest discoveries and news in the world of geoscience is featured on the website, on our blog <u>Beneath Your Feet: A Geoscience Blog</u>, as well as on our social media.

If you like our work, please consider making a tax-deductible donation to support our programs. **To Donate** - <u>https://www.canadahelps.org/en/charities/apgo-education-foundation</u>

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