

## APGO Education Foundation launches Cave Springs Geotrail on GeoscienceINFO.com

• Cave Springs Geotrail is the fifth Geotrail released on the Bruce Trail and the second in the Niagara Peninsula Aspiring Global Geopark

**December 1, 2022, Toronto, Ontario: The APGO Education Foundation ("APGOEF")** is pleased to announce the release of the **Cave Springs Geotrail** (Figure 1), the fifth Geotrail on the Bruce Trail to be released so far. The Cave Springs Geotrail is also the second Geotrail released within the **Niagara Peninsula Aspiring Global Geopark (NPAGG)**. APGOEF is very pleased to partner with the Bruce Trail Conservancy (BTC) and to be the Geoscience Education Partner for the NPAGG in developing these Geotrails as a fun and informative way for the public to learn about the fascinating geological and environmental history of the Niagara Escarpment. To visit all our Geotrails go to <u>GeoscienceINFO-Geotrails</u>.



## Figure 1. Map of Hamilton/Niagara region showing location of Cave Springs Geotrail in the Niagara Peninsula.

**Geotrails** are 1–3-hour long hikes on well established trails with stops along the way highlighting areas of geological significance. Users can experience Geotrails in person or virtually from home. Our Geotrails are designed to be readily accessible and provide the user with an immersive experience through the application of ESRI's latest ArcGIS-based technology including StoryMaps<sup>™</sup>. Key features include:

- 360-degree photos and/or drone videos to provide a thorough overview of each site,
- 3D LiDAR images that show where key features such as fossils, important structures and other geological features are on the outcrops,
- Slide bars to show where important stratigraphic units are,

- Descriptions of the geological features written in an understandable form for the public, and
- Audio descriptions are included in many of the segments.

The Cave Springs Geotrail which is along the Niagara Escarpment, features talus slopes and cliffs of the Escarpment as well as a natural spring. Users will learn about local legends and investigate mysterious carvings (Figure 2) along the trail that are rumoured to have been created in the 1960s, but are so weathered at this point, no one can accurately decipher the meaning of the messages written in the rock. Other highlights of the Geotrail include dolostone caves (Figure 3) where the temperature inside is cooler in the summer than the outside air. These cool caves retain ice long into the summer months and were once used for food storage by local Indigenous inhabitants. They were also popular tourist attractions in the late Victorian Era. The Geotrail finishes at a beautiful lookout where there is a spectacular view of Lake Ontario and the ancient shorelines of Lake Iroquois, which formed at the end of the last glaciation.

This Geotrail was developed by the GeoscienceINFO team led by Dr. Deana Schwarz, P.Geo., and the field team from the School of Earth, Environment & Society at McMaster University led by Dr. Carolyn Eyles, P.Geo. and Dr. Katie Maloney. Our goal, along with our partners BTC and the NPAGG, is to enhance public knowledge of the important geological and environmental history of the Niagara Escarpment using a hands-on and virtually accessible approach through the release of more Geotrails along the Bruce Trail and in the Niagara region.



Figure 2. 3D LiDAR model of the mysterious carving in the rock at stop #3 on the Cave Springs Geotrail.



Figure 3. Photo of the cave that was used as a refrigerator in the past, on the Cave Springs Geotrail.



Figure 4. Photo of the beautiful view at the lookout on the Cave Springs Geotrail.

Want to know more about the fascinating geological and environmental history of the Niagara Escarpment? – Watch our Geovideo at <a href="https://geoscienceinfo.com/geovideos">https://geoscienceinfo.com/geovideos</a>.

## ABOUT THE APGO EDUCATION FOUNDATION

The APGO Education Foundation ("the Foundation") 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 <a href="http://www.apgoedfoundation.ca">www.apgoedfoundation.ca</a>

<u>GeoscienceINFO.com</u> is 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<sup>™</sup> and

StoryMaps<sup>™</sup>. 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 - https://www.canadahelps.org/en/charities/apgo-education-foundation/

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