



# The Rock Record – April 2020

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Newsletter

The SGS Newsletter is produced by the SGS executive. Letters, announcements, notices, comments, photos, news and information about SGS members, etc. are always welcome. Call an executive member or write to us at:

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### President's Blurbs April 22, 2020

Hello from your new SGS Executive and Rock Record contributors. This will be my first contribution as the SGS President – I know, where have I been? Fortunately for me, I was in Cuba during the AGM when I was *elected* president, so we may not have met each other yet. Being part of the SGS for many years has been a real pleasure, hobnobbing with other geoscientists, learning neat stuff about rocks, and sampling a Dungarvan or two with many of you. I look forward to sharing many more in your fine company as this pandemic stuff works its way through. I would also like to say I am enjoying being part of this excellent group of SGS executives.

It's appropriate that I'm starting to write this segment on Earth Day – a day to celebrate how all the world's natural systems that we take for granted, sustain life on this little blue dot in the middle of nowhere. Of course, the interplay of all these natural systems is supported by the underlying nature of the earth itself – its geology. Amazing, eh?

In case you missed it, Krakatau erupted April 11<sup>th</sup>. There is amazing youtube footage available online.

We hope you enjoy the stuff we have included in this edition of the Rock Record. **Many thanks to the contributors.** This is our community newsletter so please consider contributing yourself.

### SGS Web-based Luncheon Talks – Alec Pollard (Program Chair)

Since several planned luncheon talks have been postponed due to our inability to get together, we are investigating how we can continue to offer these great presentations using a web-based platform. Stay tuned and be sure to have cold brewskies near by.

## Annual Field Trip Update

The Field Trip Committee has chosen the Yellowstone Geothermal area for our destination on this year's **annual August field trip**, planned for Thursday, August 20th (leave Regina) to Monday, August 24th (return Regina). The price will be the same as last year, \$500 per person / \$250 per person students, and includes transportation, accommodation, road lunches, and guidebook.....as always, a great deal. We are presently working out logistics, van rental, accommodation, guides, guidebook, etc. But, of course, this COVID thing has obviously thrown a wrench into just about everything, and especially anything involving traveling groups.....and especially international traveling groups such as this.

We're hoping to be in a position to say whether the trip will fly or not by July (?). No need to provide payment until that time. But we suggest that if you wish to join this trip, let John Lake know via email ([lakegeol@sasktel.net](mailto:lakegeol@sasktel.net)) your intentions. We'll keep a list of the participants and once we know for sure whether we'll be heading south or not, we'll settle up the payments.

And our **"unofficial" spring camping trip**, usually running late May-early June, is likely in greater jeopardy of not running at all. We've recently been to Cypress Hills West Block unserviced campsite on Battle creek, and this year were planning on heading to Manitoba to tour a Tyndall Stone quarry, visit the Narcisse snake pits, and possibly catch an Odanah Shale outcrop in the Manitoba Escarpment because they are diatomaceous and Profesora Velez at U of Regina Geology is mad for diatoms. We'd be very surprised if this will go ahead but will keep you posted. We may have to wait until next year on this one.  
Cheers all.

## GeoExplore Saskatchewan Update

Spring is here and the committee is pleased to report that our efforts to upgrade the printed 2002 Geological Highway Map of Saskatchewan to the digital [GeoExplore Saskatchewan](http://GeoExploreSaskatchewan.com) website are flourishing. Co-chaired by Kate MacLachlan and Ralf Maxeiner, committee members Kevin Ansdell, Emily Bamforth, Janis Dale, Michelle Hanson, Kim Kreis, Thomas Love, Hossein Narimani, Pam Schwann, and Bill Slimmon have taken the project from a simple idea in August of 2019 to a fully functioning website in just 6 months! An unofficial launch occurred in late February when Kate MacLachlan and Brian Brunskill gave a short television interview to the Regina Global Television morning team. This was made possible by the efforts of Sheena August from Association of Professional Engineering and Geoscientists of Saskatchewan (APEGS), who was also instrumental getting a logo created, based on the initial design of Michelle Hanson. In early March, Svieda Ma and Sam van de Kerckhove gave very well-organized, well-presented, and very well-received talks to hundreds of Regina school kids as part of the Society's school lecture series, in which they used GeoExplore as a basis for a virtual tour to explore an assortment of our province's geoscience features. In addition to the committee of geoscientists from the Saskatchewan Geological Society, GeoExplore was made possible by financial support from the APEGS, and in-kind and/or personnel support from the Saskatchewan Geological Survey, the Saskatchewan Mining Association (SMA), the Royal Saskatchewan Museum (RSM), and Tourism Saskatchewan. The committee has taken a hiatus from the work over the last two months but will resume with virtual meetings over the course of the summer, to finish several of the pages. GeoExplore Saskatchewan will also require constant maintenance and updates, once all the initial content has been uploaded, to keep it vibrant and fresh.





## OTHER NEWS AND EVENTS

### Membership Renewals PLEASE

It's easy to forget this. We know that. But if you could make sure you haven't forgotten that would be best. The yearly membership is now \$35. So please renew. The most convenient way to do so is online at <https://sgshome.ca/membership/membership-application>. Thanks for that.

### Virtual Field Trips - Samantha Van De Kerckhove (Secretary)

#### Virtual Trip to the Moho

<https://opengeology.org/historicalgeology/virtual-field-experiences-vfes/vfe-moho/>

Here is a blog/info site created by Callan Bentley. Callan is an assistant professor of geology at Northern Virginia Community College. He is a GSA Fellow & past president of NAGT Geo2YC as well as the Geological Society of Washington. This blog is written in language for the general public, so it might be a great option for those of you looking to keep your children's education rolling while school is cancelled.

### The Ovens Natural Park

Mike Young, an instructor at Dalhousie University, has been using his drone to create 3D models which can be used for virtual field trips. This model displays a stretch of coastline at The Ovens Nature Park near Lunenburg Nova Scotia.

[https://sketchfab.com/3d-models/ovens-anticline-beach-section-bd35dca9e057420b812d068afb5d635c?fbclid=IwAR2LTCO5I89dT-qblVI4ra-bL3Uo-0La-UQMVO9-GZV0EQ\\_GOIPQdfNmXBA](https://sketchfab.com/3d-models/ovens-anticline-beach-section-bd35dca9e057420b812d068afb5d635c?fbclid=IwAR2LTCO5I89dT-qblVI4ra-bL3Uo-0La-UQMVO9-GZV0EQ_GOIPQdfNmXBA)

The Ovens geological significance began in the 1860s when Nova Scotia's Meguma terrane was a hotspot for gold exploration. At the end of the summer of 1861, over 600 fortune-seekers were set up at The Ovens, panning the sandy beach and hacking away at gold-bearing quartz veins. In fact, the currently rocky coastline was once a sandy beach, but nearly all the sand was removed in order to extract gold.

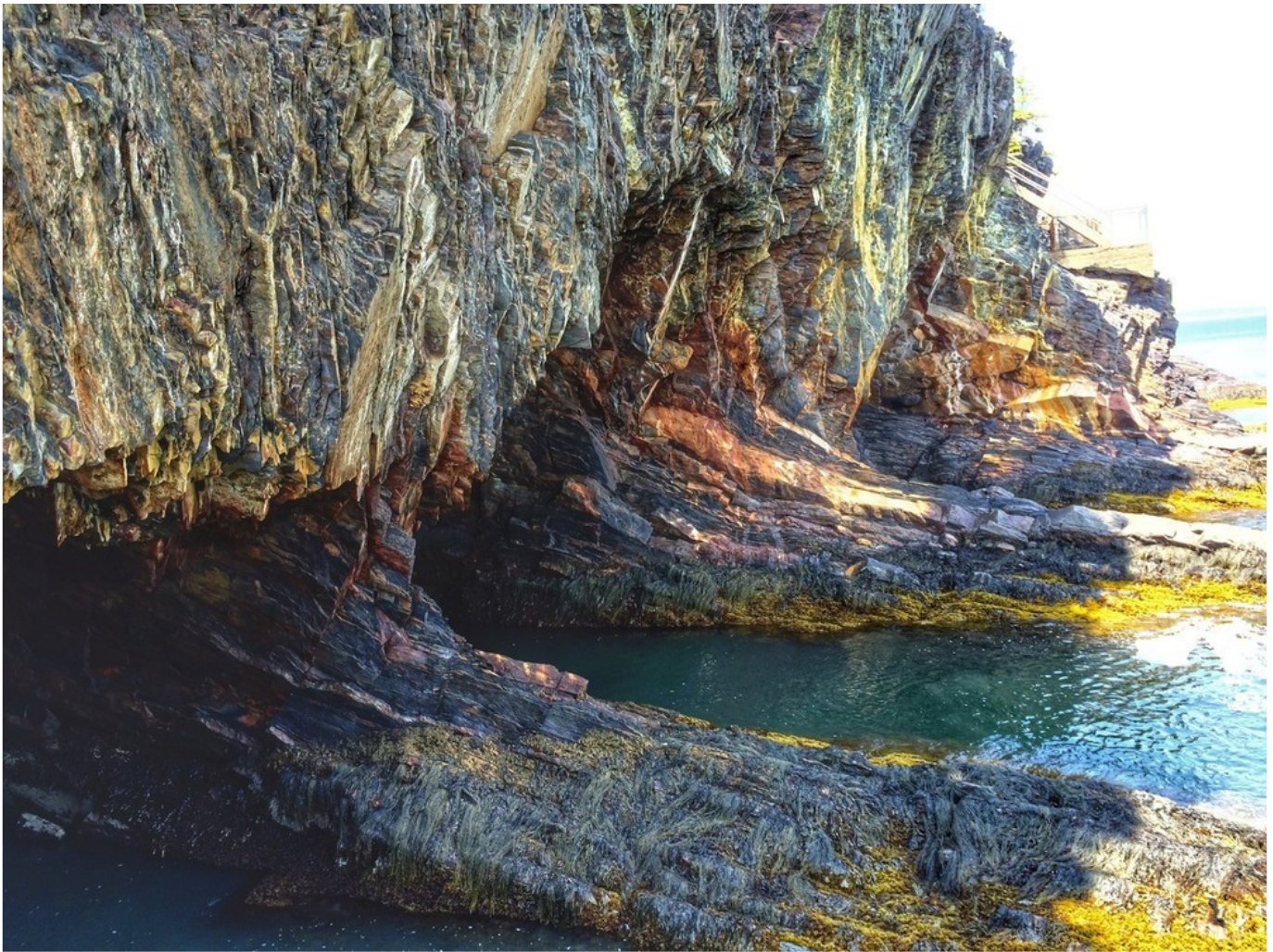
The coastline at The Ovens is composed of Meguma turbidites, which total over 12 km in exposed thickness. The rocks are weakly metamorphosed and folded. The section of turbidites exposed at The Ovens site is notably more colourful than other Meguma turbidites. The colour difference can be explained by a dramatic change in sea water conditions that





accompanied the end of the Cambrian period. The sea floor became anaerobic and the sedimentary layers became laden with carbon, sulphur, iron, copper, arsenic and other metals giving this section it's rich colours and rusty weathering<sup>1</sup>.

FYI: The Ovens Nature Park is named after the Ovens sea caves which are famous for the resounding boom created as waves enter the caverns.



Tanya Antosik <https://www.ovenspark.com/seacaves>

For more great 3D virtual geological models, check these out:

<https://sketchfab.com/AusGeol>

<https://sketchfab.com/e.Rock>

<https://sketchfab.com/callanbentley>

<https://sketchfab.com/Landy42>

### Other Web-based Talks and Geo Information Sites – David Thomas (Assistant Program Chair)

For those looking for their daily or weekly geology fix during these times of self-isolation there are a number of good websites available that are worth checking out. The following is a short list of some of the sites that I have been satisfying my geological hunger pains during the last few weeks.

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<sup>1</sup> Information on The Ovens is summarized from Geology of Nova Scotia: Field Guide by Martha Hickman Hild and Sandra M. Barr



### **MicroMyEarth**

<http://www.micromyearth.com/>

A good site to start with, which has a bit of everything for every geologist, is MicroMyEarth. The site provides a list of geological resources with links to books (free and open), courses, exercises, interactive simulations, labs, lectures, photos and teaching resources. There are also links to virtual geological field trips, Geo-webinars and Geocasts for your entertainment and learning.

### **Ore Deposits Hub**

<https://oredeposithub.com/>

This site is a platform for live geoscience presentations given by an impressive list of international ore deposit geologists. The program was started in March by three early-career ore deposit geoscientists, Tom Belgrano (National Oceanography Centre, Southampton), Alannah Brett (University of Bern) and Aaron Hantsche (University of Geneva). The Ore Deposits Hub is jointly supported by the Society of Economic Geologists and the Society for Geology Applied to Mineral Deposits.

In order to participate online you need to go on the site and register so you will receive an invitation to attend the live presentation which uses the Zoom meeting webinar platform. The talks so far have been about 50-60 minutes in length followed with about 20-30 minutes with live questions. The organizers have been putting the talks on YouTube for seven days following each presentation. Since the speakers are based around the world the meeting times can vary through the day from the early morning hours to later in the afternoon Saskatchewan time. Several of the Europe- and Australia-based speakers have been scheduled at 2:00 a.m. our time so the YouTube version is a useful option.

The series has quickly become very popular with up to 1600 people registered with Ore Deposits Hub; however, the Zoom meeting format currently only allows 300 participants so it is important to sign in early if you want to listen to the live presentation. The meetings are held every Wednesday and over the next several weeks they are scheduling two talks every Wednesday.

This is definitely a site to check out if you are in need of hearing about ore deposits but remember you need to register with the organizers in order to get a Zoom meeting invitation.

### **Nick Zentner Videos**

<http://www.nickzentner.com/>

Nick has taught geology at Central Washington State University since 1992. On his website he has a series of videos in which he largely focuses on the fascinating geology of the northwest area of the USA. The videos range from quickies such as *2 Minute Geology* (17 in the series), to *Nick on the Rocks* which are about 5 minutes (24 in series) to the *Downtown Lectures* which are generally just over an hour in length (27 in series). Since the COVID imposed self-isolation he has been doing a daily geology chat on his YouTube site which has a huge international following.

Nick is hyper-enthusiastic about geology and has a very engaging lecture style. His *Downtown Lectures*, which he is probably best known for, targets both the layperson as well as the experienced geologist. He has received numerous awards for his teaching and public outreach in geology. In 2015, Nick received the prestigious James Shea Award, a national award recognizing exceptional delivery of Earth Science to the general public. Past recipients include John McPhee, Jack Horner, Robert Ballard, and Stephen Jay Gould.



I recommend checking out Nick's site; maybe starting with his *Downtown Lectures*, particularly the lecture on *Supervolcanoes in the Pacific Northwest* or his lecture on *Flood Basalts of the Pacific Northwest*.

### **Society of Economic Geologists**

<https://www.segweb.org/>

If you are a member of SEG you may want to check out the free access that the society is providing to all its books (Reviews in Economic Geology, Monographs, Special Publications Series, Guidebooks) until June 30, 2020. These publications have been converted to pdf format. Recently I was able to access some out-of-print publications through this site which was a great bonus to my library collection. It is definitely worth checking out if you are a SEG member.

### **Geological Society of America**

<https://pubs.geoscienceworld.org/gsa/pages/special-papers>

<https://pubs.geoscienceworld.org/gsa/pages/Memoirs>

The Geological Society of America is also providing free online access to its vast collection of their publications (Special Papers and Memoir series) through to June 30, 2020. There are some real gems in the collection since they include publications going back to the early 1930s and right up to recent listings. It's worth going through the list and seeing if there are any gems that catch your geological interest.

### **SEPM Society for Sedimentary Geology**

<https://pubs.geoscienceworld.org/sepm>

Similar to the Geological Society of America, SEPM has made available free pdf versions of their books (Concepts in Sedimentology and Paleontology, SEPM Core Workshop Notes, SEPM Field guides, SEPM Short Course Notes and SEPM Special Publications) through to June 30, 2020. Definitely another site to check out. Access the [\*SEPM home page\*](#) through the Geoscienceworld link and click on [\*SEPM's online publications\*](#) and then click on [\*Books\*](#) for a dropdown list of their available online publications.

### **Mineralium Deposita**

<https://www.springer.com/journal/126/updates/17608006>

#### *55 Year Anniversary-Top 55 most cited papers!*

To celebrate 55 years of publishing Mineralium Deposita, the publisher has selected the top 55 most cited papers from the journal and has provided them for free access. Many of the papers in the list are considered to be critical pieces of research on aspects in ore deposit geology. Although some of the papers may appear dated (1990s vintage) by some of the younger geos in our society many of these papers are still go-to references in the world of ore deposits research.

In addition, Mineralium Deposita journal has moved to having many of the papers in recent issues being open access articles. For those with a keen interest in mineral deposits a perusal of the open access articles in recent issues of Mineralium Deposita might turn up some interesting free 'reads' for your library.

This is just a brief list of what is being made freely available online by publishers, journals and societies. If you have any favourite geological websites, please let me know and we can share them with our SGS members.



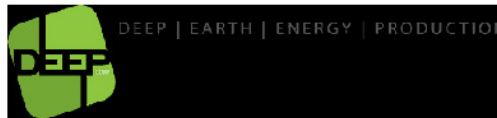


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