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2 November 2022- 6:00 PM Dinner, 7:00 PM talk Dr. David Barclay (SUNY Cortland) will present:

NYSCPG Geology Days

Megathrusts and tree-rings: high precision dating of the penultimate great earthquake in southern Alaska

A "ghost forest" of dead trees at Girdwood in Alaska records coseismic subsidence from the March 1964 M9.2 earthquake. Below the roots of these trees, a buried layer of stumps records similar coastal subsidence during the penultimate great earthquake here about 700-900 years ago. This talk will describe ongoing efforts to obtain a precise kill-date for these older stumps using tree-ring crossdating and radiocarbon wiggle-matching. A precise date would give the exact year of the penultimate great earthquake, show the length of the most recent cycle of stress accumulation and release for the northeastern end of the Alaska-Aleutian megathrust, and enable future studies to document regional evidence for coseismic land disturbance from the penultimate great earthquake. In addition to these outcomes for paleoseismology, this work is giving insight into tree-ring crossdating in the rugged maritime area of southern Alaska and into apparent offsets between radiocarbon ages in coastal Alaska and the IntCal20 calibration curve.

An application is pending with NYSCPG for this presentation to count for 1 NY PDH towards your NY-PG continuing education requirements

BOTH IN-PERSON and VIRTUAL options are available!

Virtual registrants will receive Zoom login instructions the morning of 11/2/22 and we look forward to seeing in-person registrants at the Spaghetti Warehouse!

CNYAPG Newsletter

The CNYAPG Newsletter is a monthly publication of the Central New York Association of Professional Geologists dedicated to sharing upcoming events, delivering regular articles of interest and providing the Membership a forum for discussion.

The newsletter is prepared by the Officers and Board of Directors of CNYAPG (listed below).

Officers:

Calvin Prothro, President c.k.prothro@gmail.com

Sean Pepling, Vice President SPepling@PWInc.com

Gerry Gould, Treasurer ggould@gouldgw.com

Will Hackett, Secretary Whackett@PWInc.com

Curt Lindy, Associate Vice President curtlindy@gmail.com

Board of Directors:

Dana Himmeldanahimmel@gmail.com

Nate Kranes nkranes@trccompanies.com

Bill McCuneWilliam.McCune@
arcadis.com

Lynette Mokry l.mokry@fpm-remediations.com

Justin Stroup justin.stroup@oswego.edu

Guy Swenson
Guy.Swenson@ramboll.com

Keith White Keith.White@arcadis.com



President's Message-November 2022

We are just passed peak leaf color, and November has arrived. The holiday season is about to start and let us all be mindful that it is also the start of cold and flu season. I want to thank Dr. Nicholas Metz, Director of the NEPARS REU Program at Hobart and William Smith Colleges for a great talk on atmospheric rivers over the northeastern U.S. He really showed the connections between these atmospheric phenomena and precipitation. Thanks again, Nick. I am pleased to announce that this month's talk will be by Dr. David Barclay, professor of Geology at SUNY Cortland. Dave's presentation is entitled: "Megathrusts and Tree-Rings: High precision dating of the penultimate great earthquake in southern Alaska". I, for one, am looking forward to this talk.

For those of you who did not attend the three-day Geology Days event in Saratoga Springs, you missed a truly outstanding event. I personally reconnected with someone I had not seen in over 20 years and got to meet people I have only talked to over the phone. Our past president, Guy Swenson, was one of over thirty presenters and a lot of P.Gs. got all the PDHs (Professional Development Hours) they needed to renew their New York P.G. license. Next year's Geology Days event is already in the planning stage and with over 200 attendees and numerous vendors; we are looking for it to be even bigger.

Another quick note, NYSCPG; as some of you remember, offers a special edition, seasonal beer from Lithology Brewing Company of Farmingdale Long Island. At the Geology Days event they introduced this season's beer, Peter's Porter, in honor of the council's long-time lobbyist Peter O'Connell, whose tireless work helped get the P.G. licensing bill passed in New York. Keep an eye out for it.

For us here in Central New York, here are some statistics. There are 1,237 NYS licensed geologists, 48 reside in Onondaga County, 6 reside in Cortland County, 11 reside in Madison County, 5 reside in Oneida County, and 2 reside in both Broome and Cayuga Counties and 1 each in Oswego and Jefferson Counties.

Also, a quick update on the Geoparks Bill in New York State. It is moving forward, and I have seen a preliminary list of State Parks that may be on the final list and there are two State Parks in Central New York. Stay tune! I encourage all of you to try to get out and enjoy the remainder of the fall colors. Take a hike, or stroll through one of the local state parks. Clark Reservation, Green Lakes, Pratt's Falls, and Chittenango Falls all are near Syracuse and have beautiful scenery and great exposures of the local stratigraphy, especially at Clark Reservation, Pratt's, and Chittenango Falls. If you take photos, please submit some of them for next month's newsletter.

CNYAPG has contacted 24 public and private colleges and universities in Central New York to make them aware of our 2022-2023 Earth Science Student Research Grant, and student proposals must be submitted by December 9, 2022. The CNYAPG Earth Science student Research Grants will directly support student research and help disseminate that research through conference attendance. The winning student (s) will be awarded grants totaling \$1000 in combined value. Any monetary contribution to the Student Research Grant fund you would like to offer would be most welcome.

President's Message (Continued...)

I will keep this communication short (because I am fighting a cold) so to end this letter a customary quote: "We are not here to curse the darkness, but to light the candle that can guide us thru that darkness to a safe and sane future". — John F. Kennedy

Calvin K. Prothro, P.G., CPG President of CNYAPG



Guy Swenson Recently Presented at the NYSCPG Geology Days

Hydraulics of Subsurface Injections By Guy Swenson

In situ remediation technologies such as bioremediation, in situ oxidation, in situ chemical reduction, surfactant flushing, etc. all rely on hydraulics to introduce remediation fluids into the subsurface. Hydraulics continue to play a key role in post-injection processes and monitoring. This presentation will provide an overview of the hydraulics of subsurface injections and the post-injection behaviors of the injected fluid and groundwater.

The CNYAPG was founded in 1993 to strengthen and advance the geological sciences. CNYAPG conducts regular meetings on the third Wednesday of each month from September to May. Meetings feature dinner and distinguished speakers whose presentations invite comment and discussion.



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Upcoming Events

November 2 2022 7:00 PM- CNYAPG- David Barclay- SUNY —Dinner Meeting

www.cnyapg.org

December 7 2022 7:00 PM- CNYAPG- Tao Wen- Syracuse University — Dinner Meeting

www.cnyapg.org



Silver Lake, New York

CNYAPGGovernance

Membership Renewal

CNYAPG's membership period follows the CNYAPG meeting year from September through August. Renewals are due in September. To renew or become a new member, simply complete the membership form, available on our website at www.cnyapg.org. Membership is only \$25 per year and all money received is used in support of our organization.

Join CNYAPG at our social networking groups on Facebook and LinkedIn. These sites (always under development) will provide online forums for discussion, as well as another way to inform our members and networking opportunities. For more information about our social media sites e-mail us at admin@cnyapg.org.

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