

#### NORTHWEST GEOLOGICAL SOCIETY

A regional association of professionals, students & others interested in geology
Please browse www.nwgs.org for more about us



# April, 2019 Newsletter

Volume 33, Number 4



## **April 9 Program Speaker**

Speaker: Wayne Ranney, Author & River Guide

<u>Title</u>: The Grand Canyon: Is It Old, Young, or Both?

<u>Abstract</u>: The Grand Canyon is perhaps Earth's most recognizable landscape yet a complete understanding of its age and a precise mechanism of formation has proven elusive,

5:30pm: No-host social hour6:30pm: Buffet dinner7:30pm: Speaker programAll are welcome to attend —reservations are requiredif coming for dinner.

**▶** Reservations here



even after 160 years of scientific study. There is no doubt that fluvial erosion by the Colorado River and its tributaries are what created the Grand Canyon. But the specific processes are still debated and the ages proposed range between 70 and 6 million years, with some workers stating that the canyon is "old" and others proposing it is "young." A review of historical theories from the mid-19th through 20th centuries provides a background in explaining these discrepancies. However, new research since 2000 provides a clearer picture of the history of the river and thus the canyon. New field work, as well as sophisticated laboratory techniques, have teased ever-more information out of the canyons stubborn rocks. And a possible solution to the "old" vs. "young" debate has been proposed recently.

PROGRAM DINNER RESERVATIONS: NWGS members: \$40; Non-members: \$45; Full-time students: \$20. Add \$5 for LATE REGISTRATION. Make your reservation and payment on-line at <a href="https://www.nwgs.org">www.nwgs.org</a> (or mail your payment to Northwest Geological Society, 4616 25th Ave NE #397, Seattle, WA. 98105 (must be received by Thursday prior to meeting). Contact Secretary <a href="https://www.nwgs.org">Beth Tanner</a> with questions about dinner reservations.

If attending the speaker program only, a \$5 voluntary donation to help defray the meeting room cost is requested. Location (see map p. 3): Pacific Dining Hall at the Talaris Conference Center, 4000 NE 41st St., Seattle, WA., 98105. Directions: See on-line directions with map, or: from I-5 northbound or southbound in Seattle, take Exit 168B (NE 45th St.). Drive east on NE 45th St. past UW down the hill and past University Village. Turn south (right) onto Mary Gates Memorial Drive at the 5-way intersection. MGM Drive will curve east (left) and become NE 41st St. Continue several blocks to the Talaris Conference Center entrance on the north (left) side. We meet in the Pacific Dining room on the left).

## **Upcoming Speakers and Field Trips**

May 7 (<u>not</u> the 14th): Student poster competition with awards in lieu of a speaker, although there may also be a speaker, yet TBD. Stay tuned!

**Spring Field Trip:** access to the Twin Sisters Dunite Quarry has not materialized, so plans are in the works for a great alternative. An announcement will be made as soon as a decision is made.

Fall Field Trip: Jim O'Connor (April, 2017 speaker), USGS, will lead a Channeled Scablands trip, Oct. 4-6, 2019. If you would like to volunteer to give a talk or lead a field trip for NWGS, please contact President Heather Vic.

#### **Announcements**

- The Student Poster Competition will be at the May 7 meeting (not May 14). If you have entered the competition, contact Poster Chair Maura O'Brien if you have questions.
- · Next Board of Directors meeting: April 9, 4:30 P.M., Talaris Conference Center. Key agenda item: finding a new meeting venue!

YOU would like to be involved!



Upstream view along the Inner Gorge of Grand Canyon and the Colorado River near Phantom Ranch. The steep gorge is cut into the Mesoproterozoic Vishnu Schist and is the most recent part of the Grand Canyon exposed by erosion. The Colorado River is responsible for the Grand Canyon but much of the excavation of the great gorge is accomplished along tributary streams. © Wayne Ranney.

### **About NWGS**

NWGS, a regional association of professionals, students & other persons interested in geology, provides a forum for the presentation and discussion of a wide range of geologtopics, emphasizing those the Pacific Northwest fundamental scientific interest. YOU would like to be involved!

Program meetings: 2<sup>nd</sup> Tuesdays, October through May in the Pacific Dining Hall at the Talaris Conference Center in Seattle (see 1st page). Anyone may attend the speaker program, but a reservation is necessary for those wanting dinner (see 1st page). Field trips (members only): one in late spring/early summer and one in late summer/early fall, usually of 1-3 days in length. Membership is open to anybody with a professional or amateur interest in geology. Annual dues: Professional: \$42; Student: \$5. To join or pay annual dues: send a check payable to NWGS to Secretary Beth Tanner, 4616 25th Ave NE #397, Seattle, WA. 98105. Please include your name, address, home phone, email, and employer/affiliation (if any). Professional dues may now also be paid at www.nwgs.org. YOU would like to be involved!

## Recommended Readings

Ranney, Wayne, 2012, Carving Grand Canyon, Grand Canyon Association, 190 pp.

Ranney, Wayne, 2013, A short history of ideas on the origin of the Grand Canyon, in, New Mexico Geological Society Guidebook, 64th Filed Conference, Geology of the Route 66 Region: Flagstaff to Grants, p. 167-174.

Blakey, Ron, and Ranney, Wayne, 2008, Ancient Landscapes of the Colorado Plateau, Grand Canyon Association, 160 pp.

Please send your reading recommendations to Newsletter Editor Tom Bush.

To report a change of email or postal address or request to be removed from mailings, notify Membership Chair George Bennett . Questions or comments? Contact President Tom Colligan.

#### **NWGS Board**

President Heather Vick Dep. of Ecology

President Katie Brower

Elect Graduate, W.W.U.

Past Tom Colligan

President Floyd | Snider

Secretary Beth Tanner

Windermere Real Estate

Treasurer George Bennett

Bennett Consulting

At-Large Linda Khandro

**Board** Geoscience Instructor Members John LaManna LaManna Geosciences

#### Other Personnel

Membership George Bennett Chair Bennett Consulting

Field Trip Kathleen Good-Coordinator man, AMEC

Editor & Pierce College

Newsletter Tom Bush

Publications Puyallup

Poster Maura O'Brien

Chair Wa. Dept. of Ecology

Webmaster Julie Masura Univ. of Washington

Facebook Eric Baer Pagemaster Highline CC

