

NORTHWEST GEOLOGICAL SOCIETY

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

February, 2010 Newsletter

Volume 23, Number 6

February 9 Program Speaker

Speaker: Eric Cheney, Prof. Emeritus, UW Dept. Earth & Space Sciences

Title: The future of hydrocarbons: Hubbert's peak or plateau?

Speaker Abstract: In 1956 M. King. Hubbert predicted that the production of oil in the Lower 48 States would peak in 1970, which it did! Because the Lower 48 are the most explored area in the world, even too many geoscientist believe that world oil will soon peak (with economic, political, and even military consequences).

5:30pm: No-host social hour 6:30pm: Buffet dinner 7:30pm: Speaker program All are welcome to attend reservations are required if coming for dinner.

Hubbert's time was unusual. The price of oil was fixed; so, while inflation continued, exploration and production became progressively less attractive. Furthermore, the scientific and technological advances since Hubbert's prediction are awesome: plate tectonics, sequence stratigraphy, off-shore to deep-sea production, seismic reflection profiling, hydrofracturing, horizontal drilling, etc. New sources of hydrocarbons since Hubbert's prediction are: offshore and deep-sea oil and gas, oil and gas in "tight" formations, Liquified Natural Gas, Athabasca tar sands, improved efficiencies and maybe conservation, oil shale, ethanol, algae, etc. (See Recommended Readings on p. 2 for more details or on-line pdf version).

PROGRAM DINNER RESERVATIONS: NWGS members: \$30; Non-members: \$35; Full-time students: \$10. Add \$5 for LATE REGISTRATION. Mail check to <u>Ginny Agnew</u>, 935 Pine St., Edmonds, WA. 98020 (must be received by Thursday prior to meeting). Contact her at 425-776-6151 or <u>agnewv@msn.com</u>.

If attending the speaker program only, a \$5 voluntary donation to help defray the meeting room cost is greatly appreciated.

Location: Pacific Dining Hall at the <u>Talaris Conference Center</u>, 4000 NE 41st St., Seattle, WA. Ph 206-268-7000. **Directions:** See <u>on-line directions with map</u>, 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 <u>Talaris Conference Center</u> entrance on the north (left) side.

Upcoming Speakers and Field Trips

March Speaker: Dave Morgan, Sumas, WA., Fossils of Washington State.

April Speaker: Paul Hammond, Portland St. U., Structures in the CRBG south of Snoqualmie Pass.

May 18th Speaker (note date change to 3rd Tuesday of May): TBA.

Spring, 2010 Field Trip: Southern Cascades, Paul Hammond, June 11-13.

Fall, 2010 Field Trip: Holocene deposits of Mt. Baker, Dave Tucker, dates TBA.

Other Announcements

Dues are due! Please maintain your membership currency by squaring up with <u>Dan Smith</u> (see p. 2)! Your research posters are requested! POSTERS ARE WELCOME AND ENCOURAGED AT ALL MONTHLY GATHERINGS, whether at the undergraduate, graduate, or professional level! May is student poster night. Win big prizes!

Nominations are needed for NWGS President Elect for 2010. Please contact <u>John Figge</u> to nominate yourself or someone else!

Next Board Meeting: March 9, 4:30pm (tentative), <u>Talaris Conference Center</u>.

Please see the <u>NWGS website</u> for detailed announcements.

Contact webmaster Julie Masura if you have any announcements to post on the website.

Dhoto Cootlight

Photo Spottight

View looking SE into the core of the Bald Mtn anticline showing Miocene Columbia River Basalt Group (CRBG) flows deformed into an overturned, NE-verging fold, Yakima Canyon, central Washington. This fold and others like it are part of the Yakima Fold and Thrust Belt, a NW-trending belt of deformation in the CRBG. Because porous and permeable Eocene and Oligocene arkosic sediments exposed on the eastern flank of the Cascades are known to extend under the CRBGs, structures such as this throughout the Columbia R. plateau have been the focus of recent hydrocarbon exploration. Photo by T.



Your geology photo submissions (~1MB) with captions are appreciated. Please email to Newsletter Editor Tom Bush.

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 geologic topics, emphasizing those of the Pacific Northwest or of fundamental scientific interest. Program meetings: 2nd 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: \$30; Student: \$5. To join or pay annual dues: send a check payable to NWGS to Treasurer Dan Smith, 10203 40th Ave SW, Seattle, WA. 98146. Please include your name, address, home phone, email, and employer/affiliation (if any).

Recommended Readings

Cheney, E.S., and Hawkes, M.W., 2007, The future of hydrocarbons: Hubbert's Peak or a plateau?, Geological Society of America GSA Today, v. 17, No. 6, p. 69-70. (See on-line pdf version.)

Tucker, D.W., Hildreth, Ulrich, T., Friedman, R., 2007, U-Pb detrital zircon geochronology and provenance of the late Paleoproterozoic Dubawnt Supergroup: Linking sedimentation with tectonic reworking of the western Churchill Province, Canada, GSA Bulletin, vol. 119, p. 324-328.

Please send your reading recommendations to Newsletter Editor Tom Bush.

NWGS Personnel

President John Figge **President Elect** TBA **Past President Donn Charnley** 206.546.3868 Secretary Dan Smith 206.937.5313 Treasurer Ginny Agnew 425.776.6151 At-Large Board Members Julie Masura John H. Whitmer **Greg Ferris** Field Trip Coordinator **Greg Ferris** 206.285.2119 **Publications Director** John Figge Poster Coordinator

Newsletter Editor
Tom Bush
253.840.8484

Lars Gilmour 425.285.2852

Webmaster

Julie Masura

To report a change of email or postal address or request to be removed from mailings, notify Secretary <u>Dan Smith</u> at 206.937.5313.

Questions or comments? Contact President <u>Donn Charnley</u> at 206.546.3868.

Northwest Geological Society 10203 40th Ave SW Seattle, WA. 98146

POSTMASTER: Forwarding & Address

Correction Requested.

INTERNAL MAILROOM: PLEASE OPEN, DISTRIBUTE & POST!