

Serving Professionals in Engineering, Environmental,
and Ground Water Geology

OREGON SECTION

NEWSLETTER

The Official Newsletter of the Oregon Section Association of Engineering Geologists

April, 1998.

VOLUME 98, NUMBER 04

APRIL MEETING:

Speaker: **Andrew Fountain**, Assistant Professor
Dept. of Geology, Portland State University

Title: **"Glacial studies in the Taylor Valley, Antarctica**

Date: **Thursday, April 16, 1998**

Times: 6:00 PM Social hour
7:00 PM Dinner
8:00 PM Talk

Where: **McMenamins Brewpub**
2927 SW Cedar Hills Blvd.
Beaverton, Oregon

Menu: \$10/person; Chicken Extravaganza, High Pasta,
Communication Breakdown Burger, Cheeseburger,
Garden Burger

Reservation: Call the receptionist at David Newton and Assoc.,(503) 228-7718.

Background on speaker:

Andrew has recently joined the departments of geology and geography at Portland State University. He has a BS degree from St. Lawrence University, an MS from the University of Alaska, and a Ph.D. from the University of Washington. His specialties are glacial hydrology, glaciology, geomorphology, remote sensing, and hydrology. He has worked for CREL (Cold Regions Research Laboratory) and the U.S. Geological Survey (on and off for almost 20 years from 1979 to last year). He has worked on Arctic research projects such as the Columbia Glacier and the Yukon River Freezeup. He is currently working on the Mt. Rainier in the Cascades doing mass balance studies on the glaciers and relating them to climatic change. He is working in the Antarctic in the Taylor Valley region on the glaciers doing mass balance studies. He has been co-chair of the North American Commission on glaciers and climate (1990-1994), secretary/treasurer of the International Association of Hydrological Sciences International Commission on Snow and Ice, and is currently an associate editor of the Journal of Geophysical Research (Solid State). Andrew's wife, Virginia Butler, is a popular professor in archeology at Portland State.

Abstract:

Andrew will be talking about not only his research on glaciers of the Taylor Valley in Antarctica, but the overall research going on in the valley. He is estimating the glacier mass changes and developing runoff models for glaciers of the valley. The researchers are looking at the overall picture of climatic change. He will have many beautiful slides and lots of interesting data!

Message from the Chair:

Last month we had a super meeting and a chance to meet John Peck, the national president of AEG. A group of 32 gathered at the Old Spaghetti Factory to hear an excellent slide show on Yucca Mountain where John has been working for the past 10 years. We also had past AEG president, Eldon Gath, who was in Oregon doing some research so decided to come to the meeting. Also at the meeting we had the pleasure of presenting our case histories book to Mrs. Herb Schlicker and her son. We had dedicated the book to Herb Schlicker, one of the great pioneers in engineering geology in Oregon. This month will be a super meeting and a chance to meet one of Portland State's new faculty members, Andrew Fountain.

Next months newsletter will be the last until the fall and it will be a big one. There will be so many things to discuss. Our meeting in May will be the last one until September, too. In the newsletter we will be voting on our new Treasurer. David Scofield and Monte Murbach have both volunteered to run for the office. Many thanks to both of them for volunteering. We will also be voting on reducing the officer terms from 2 years to one year. At the meeting we will also have an end of the year awards ceremony where we give out plaques to the past chairs of the section for the past 8 years and welcome the new officers as they move up the ladder. We will not be at McMenamins as they were booked. Diane is working on a new exciting place for the meeting.

I will also be attending the mid-year board meeting for AEG in LasVegas next weekend. If you have anything you wish to have me bring up, be sure to mention it to me. It has been a real pleasure serving as chair for the past two years. We have accomplished a lot with putting on a successful national meeting, putting out our book, and having 17 great monthly meetings and one workshop and two field trips. We have been busy, but we have all benefited a lot! Best wishes to Dave Michael who takes over in May. The section is very healthy from a membership standpoint and also monetarily. Have a Happy Easter!

Scott Burns, Chair, Oregon Section

Upcoming Field AEG trips:

(more information in the next newsletter):

May field trip: May 30, Saturday, 8:00 AM to 5:00 PM, \$25 which includes gourmet lunch buffet and beverages. Landslides in the Portland: visit 23 sites in Portland where landslides resulted from the February 1996 storms. We will discuss processes, causes, and remediation measures. We will also talk about changes in codes and ordinances. Leader: Scott Burns More details in next month's newsletter

June field trip: "Geology of the Wine Country of Yamhill County". We will spend a leisurely Saturday discussing how the geology has affected the soils of the county and how certain soils are selected for the best grape production and the finest wines. We hope to visit five to six wineries to get a good cross-section (geologists are into cross-sections) of the different geologically affected wines. Leaders: Diane Murbach, Monte Murbach, Scott Burns

July field trip: " Engineering geology of the Barney Reservoir Dam Raise". We are bringing this popular field trip back from last year. Many people missed it and would like to see the site. The project is almost completed. The paper written by Charlie in the case histories volume on the project won one of the outstanding paper awards. Leader: Charlie Hammond

August 21 field trip: "Debris flow flume in action". The 50th anniversary of the H.J. Andrews Experimental Forest will be this day in August. We will visit the forest to see the debris flow flume of Dick Iverson (USGS, Vancouver) in action. We will also visit the forest and see the site of so much of the forest geomorphology work in Oregon.

9) Annual Case Histories Course in Environmental and Engineering Geology at Portland State. Scott Burns is again teaching his case histories class at PSU. Below is a list of the speakers. You are invited to visit a lecture or two if you feel inclined. There are some super ones. The class meets from 5:15 - 6:30 PM on Tuesday and Thursday nights at PSU in Cramer Hall room S17. Most of the speakers have articles in the new case histories book that the students are using for the course. Most of the members are members of AEG. The list is below:

Proposal: Change officer terms from two years to one

year. The board has unanimously backed a change in our by-laws which would change the officer terms from two years to one year.

Every two years we elect a new treasurer. That person is then committed to 10 years of service as the treasurer becomes the secretary who becomes the vice chair, then the chair and finally the past chair which we feel is a lot of work. We feel that we have many capable leaders in the group to allow new officer elections each year. The national likes having two year terms so the chairs who come to the national board meetings are there for four meetings not two which allows for greater continuity and less relearning each meeting. We would follow the Denver section model and have the vice chair go as a non-voting member to the mid-year board meeting the year before he/she takes over as chair of the section. Therefore, we would have a chair at three meetings, not four, during their term of office.

a) pros for the change: more people can become officers, less time of service when you make the commitment to serve; we have new blood coming into the organization all of the time.

b) cons for the change: It will cost us about \$500 more each year from our treasury as we pay for the mid-year board meeting travel expenses from our budget.

We discussed this a little at last month's meeting. We will

mention a little more about it this month and will vote on it at the same time we vote for officers.

Annual Case Histories Course in Environmental and Engineering Geology at Portland State:

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Do you have a case history of a project that you wish you could write up for publication but have no time to do it? Many consultants have this problem. There is no time! Maybe you had a great case history that never made it into our Oregon case histories book. Here is your chance to see that project see the light of day in a journal! Scott Burns is teaching his graduate course in Case Histories in Environmental and Engineering Geology at Portland State this spring. The students must write up a case history for their term paper. The intent is to have each student team up with a practicing geologist and use real world data. The student will write the project up using guidelines from the journal Environmental and Engineering Geosciences. The consultant will be the first author and the student the second author. The student will learn from the whole experience, and after the paper has been revised a few times, it will be submitted to the journal for consideration for publication. Contact Scott Burns if you are interested in teaming up with a student (503-725-3389).

**GEOLOGY 571: CASE HISTORIES IN ENGINEERING AND ENVIRONMENTAL GEOLOGY
" SCHEDULE OF TALKS, SPRING 1998"**

April 9: Paul McBeth, Principal, PNG Environmental, Inc., Tigard, Oregon

McCormick and Baxter Hazardous Waste Site, Portland, Oregon

April 14: Tim Pfeiffer, Foundation Engineering, Tigard, Oregon
Rockfall simulation models and rockfall case histories in Oregon

April 16: Sue D'Agnese, Region 3 Geology Manager, Oregon DOT
Wilson River rockslide, milepost 31, Highway 6, Tillamook County, Oregon

April 21: John Kuiper, AGRA Earth and Environmental, Tigard, Oregon
Characterization, risk assessment and remediation strategies of chlorinated solvent contamination beneath the Tacoma Street Overpass, Highway 99, Portland, Oregon

April 23: Derek Cornforth, Principal, Cornforth Consultants &

Landslide Technology, Tigard, Oregon
Pelton Landslide: An unusual double-wedge failure or the sediment retention structure on the Toutle River or Highlands Landslide of Portland

April 28: L. Radley Squier, Principal, Squier Associates, Lake Oswego, Oregon
Foundations and excavations for high-rise structures in downtown Portland, Oregon

April 30: Peter Stroud, Kleinfelder Inc., Beaverton, Oregon
Hydrology baseline study, Newberry geothermal project, Newberry Volcano, Central Oregon

May 5: Tom DeRoo, Engineering Geologist, U.S. Forest Service, Mt. Hood National Forest, Sandy, Oregon
Factors affecting landslide incidence after large storm events during the winter of 1995-1996 in the upper Clackamas River drainages, Oregon Cascades

May 7: Chris Hyatt, Cascade Earth Sciences, Portland, Oregon
Hydrogeologic modeling for risk assessment of dissolved chlorinated solvents at a facility in the central Willamette Valley, Oregon

May 12: Charlie Hammond, Cornforth Consultants and Landslide Technology, Tigard, Oregon
Engineering geology of the Trask River Dam raise, Oregon Coast Range

May 14: Tim Blackwood, Geoengineers, Tigard, Oregon
Mass wasting assessments in the analysis of two watersheds on private timberland in the Coast and Cascade Ranges of Oregon

May 19: Frank Reckendorf, Principal, Reckendorf and Associates, Salem, Oregon
Geologic hazards of development on sand dunes along the Oregon coast

May 21: Gary Peterson, Vice-President, Squier Associates, Lake Oswego, Oregon
Engineering geology and drainage of the Arizona Inn landslide, US Highway 101, southern Oregon coast

May 26: Robert Deacon, Principal, Wright-Deacon & Associates, Portland, Oregon
Collapsed lava tubes cause redesign of foundation scheme of St. Vincent Hospital, Portland, Oregon

May 28: Tom Kuper, Principal, David Newton and Associates, Portland, Oregon
Engineering geology aspects in design and construction in wetland mitigation: case histories from Portland, Oregon

Dorian Kuper, Principal, David Newton and Associates,
Portland, Oregon

Environmental concerns in the permit process of quarries

June 2: Jerry Black, DOGAMI, Portland, Oregon

Site-specific seismic hazard investigations in Oregon

June 4: Mavis Kent, Oregon Department of Environmental Quality,
Portland

Basic geology is still important in cleaning up sites

Rick Kent, President, Geoenvironmental and Geologic
Services, Battleground, WA

Engineering & geology study along Johnson Creek, Portland, Oregon

Short news items:

National Meeting in Seattle: Remember that the abstract deadline for papers for the fall meeting is coming up soon. The deadline is May 1!

New Members: We would like to welcome to new members: Scott Wallace of Kleinfelder in Beaverton who is an associate member. Scott has a super article in the case histories volume. Lynn Green is a new student member. Lynn is a student at Portland State University working on his M.S. degree.

Note: We will need a new membership chair for the coming year. Ed Stearns has been our chair for years and he has decided to step down. Ed has done a super job and has the whole system under control. Many thanks, Ed!!! If you want to volunteer for the position, see Scott Burns.

Pacific Northwest Mining and Metals Conference: April 11-13, 1999 in Portland at the Doubletree at the Lloyd Center. The organizers of this conference would like to have us participate in this conference. Our two groups combined with the GSA group of Portland State to put on a fine meeting in the spring two years ago at the same place. Dave Michael has volunteered to be our liaison.

Southern Oregon Meeting? Do we have an organizer in Medford, Roseburg or Eugene? Last year we had a super meeting in Roseburg and there was talk of having three meetings each year in the southern part of our state. We just need for someone to step forward and organize the meeting. We will publicize it. Call Scott Burns, Oregon chair, for details.

Update on the AEG Oregon Case Histories book: All of you who have ordered the book should have received it. We have gotten many great comments about the book. Congratulations to the authors. All of the photos have been returned to me. I will be returning them to the authors in two weeks (as soon as final exams are over). I also have about half of the reprints of the articles to give to the authors. They will be mailed out in two

weeks or you can come by my office and pick them up. The price of the book has gone up to \$79.95 and the new order forms are in this newsletter. Scott Burns, editor

AEG Homepage: check it out: [http:// www.aegweb.org](http://www.aegweb.org)

Seismic Zonation for the Coast of Oregon: The Building Codes Division of the state is considering a change in the seismic building code from zone 3 to zone 4 for the coast. This is because of the high potential for subduction earthquakes. I would like us to make a recommendation. We will discuss this at the meeting in our announcements.

Board of Geologist Examiners the new address and phone numbers for the Board is:

Board of Geologist Examiners
726 Hawthorne Ave. NE
Salem, OR 97301
Phone: 503 362-2666
Fax: 503 362-5454

“AEG” CALENDAR:

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|---------------------|--|
| April 16 | April Oregon Section Meeting |
| April 19-22 | First International Conference on Site Characterization, Atlanta (ASCE, Geo-Institute, ISSMGE) |
| May 21 | May Oregon Section Meeting: Jim O'Connor, "Quaternary Geology of the Willamette Valley" |
| Sept. 19-20 | Friends of the Pleistocene, Willamette Valley (Scott Burns and Jim O'Connor, leaders) |
| Sept. 21-25 | IAEG meeting in Vancouver, B.C. |
| Sept. 26-30 | AEG National Meeting in Seattle, WA (abstracts due next month) |
| October 4-10 | SEPM Research Conferences: "Sedimentary Record of Natural Disasters", Portland |

PUBLICATION ANNOUNCEMENT AND SPECIAL DISCOUNT

ENVIRONMENTAL, GROUNDWATER AND ENGINEERING GEOLOGY: APPLICATIONS FROM OREGON

PUBLISHED JANUARY 1998. Hardcover.

Dr. Scott Burns, under the auspices of the Association of Engineering Geologists, selected 82 authors from 27 consulting firms, nine government agencies, and two universities to prepare papers for this special comprehensive compendium. In this volume, you will find 69 articles organized into 8 chapters covering major concerns in applied geology. In this collection of case histories and review articles, each author describes a problem and demonstrate how they solved it.

Summary of Contents by Chapter:

- 1. Geologic and Physiographic Provinces. Describes the physiographic provinces of the state along with the geologic history.
2. Practice. This chapter offers a lawyer's perspective on geologic practice in Oregon, including registration practices and important regulations a geotechnical practitioner should know.
3. Facilities. A fascinating collection of articles -- the largest chapter -- including how geology and geologic processes are factors in the siting of dams, buildings, and hospitals.
4. Transportation. The application of geology along major transportation routes: highways, railroads, coastal and inland waterways.
5. Geohazards. Three review articles on earthquakes, volcanic, and landslide hazards.
6. Planning. Unique coverage of land use planning and environmental protection focusing on mining and ecosystems along the coast, rivers, wetlands and forests.
7. Water Resources. The evaluation and management of water supplies is a crisis worldwide.
8. Contaminants. Articles discuss environmental geology case histories. Superfund sites. Fertilizer contamination.

This is not a book of theory. Not just a reference book. You will have a hardcover volume of actual hands-on solutions. Answers to problems. Solutions that will inspire readers to new heights of professional excellence.

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"AEG - OFFICERS"

1996 - 1998

(* - means area code 541)
(N.M. - means National Meeting)

Position	Name	Telephone		
		Daytime	Home	FAX
Chair	Scott Burns	725-3389	692-9618	725-3025
Chair-Elect	Dave Michael	359-7448	357-0238	357-4548
Newsletter	"			
Secretary	Charlie Hammond	452-1100	274-1437	452-1528
Treasurer	Diane Murbach	228-7718	538-8352	228-7781
Past Chair	Sue D'Agnese	*957-3595	*673-1797	*957-3604
Membership	Ed Stearns		661-0462	

MEMBERSHIP

For application forms for Membership in the National AEG, call Ed Stearns who is our membership chair at 661-0462 (h). He will also have copies at the monthly meetings. Membership is on a calendar year basis. Starting this year, if you are a national member, they will collect our local dues of \$10 which just covers our newsletter costs. If you would like to subscribe to the local newsletter (comes out 9 times a year) without being a national member, fill out the form below and mail to Diane Murbach. Note: the following form is only for people and organizations who wish to subscribe to the Oregon AEG Newsletter without being members of the national AEG.

APPLICATION FOR LOCAL MEMBERSHIP IN OREGON SECTION, AEG:

NAME _____

AFFILIATION: _____

MAILING ADDRESS: _____

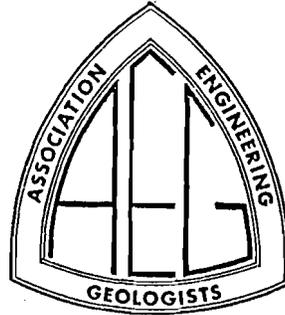
TELEPHONE: _____

Mail form and \$10 to Diane Murbach, David Newton & Associates, 1201 SW 12th. Ave. Suite 400, Portland, OR 97205.

ANNOUNCEMENT OF OUR NEXT EXCITING MEETING

April 16, 1998

AEG



*Dave Michael, Editor
Oregon Chapter, AEG
c/o ODF NWOA
801 Gales Creek Rd.
Forest Grove, OR 97116*



APR 11 1998

**Charles M. Hammond
Cornforth Associates
10250 SW Greenburg Rd. #111
Portland, OR 97223-5460**

