



Serving Professionals in Engineering, Environmental,
and Ground Water Geology

OREGON SECTION

NEWSLETTER

The Official Newsletter of the Oregon Section Association of Engineering Geologists

May, 2001

VOLUME 01, NUMBER 05

SEPTEMBER MEETING:

Speaker: **William C. Haneberg**

Talk: ***“A Process-Based Probabilistic Approach to Spatially Distributed Landslide Hazard Assessment”***

Date: **Thursday, Sep. 20, 2001**

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

Where: ***Billy Reed's Restaurant & Bar***
located at The Standard Dairy at:
2808 NE MLK Jr. Blvd
one block North of Knott St.
for specific directions see: <http://www.billyreeds.com/directions.html>

Menu: \$13.50/Buffer (Request preference - Bourbon Chicken, or Deep Pan Salmon)

Reservations: Call URS at: 503-222-7200 by noon Wednesday (9/19/01) request preference on dinner
“A reservation made is a reservation paid.” Please call to cancel if you can not attend. Thank you!

ABSTRACT

A Process-Based Probabilistic Approach to Spatially Distributed Landslide Hazard Assessment

William C. Haneberg

A first-order, second-moment (FOSM) approach can be used to quantify the influence of parameter uncertainty and variability on the calculated stability of infinite slopes. The FOSM method described in this presentation allows the analyst to select input probability distributions, takes into account the influence of all variables in the factor of safety equation (including seismic accelerations and the effects of vegetation if desired), and is not restricted to a particular output probability distribution. Perhaps most importantly, the FOSM method is particularly well suited to spatially distributed or GIS-style applications because it is non-iterative and computationally straightforward. This simplicity makes the FOSM method a potentially valuable tool for watershed analysis, land use planning, transportation corridor routing, and regional hazard analysis. Results can be presented as maps showing 1) the factor of safety mean and variance, 2) the probability of sliding or stability, 3) a distribution-independent slope reliability index, and 4) binary hazard zones with boundaries identified using digital image analysis of the model results. One such application is illustrated using a spatially distributed FOSM analysis of a landslide-prone area near Wheeling, West Virginia, in which results of the FOSM model are shown to compare favorably with both a pre-existing landslide inventory map and the results of the morphometric landslide hazard model SMORPH.

Biographical Sketch

Bill Haneberg has been an independent consulting geologist based in Port Orchard, Washington since 1999. Prior to that he was an Assistant Director and Senior Engineering Geologist with the New Mexico Bureau of Mines & Mineral Resources and taught in the graduate program at New Mexico Tech. He earned a Ph.D. in geology from the University of Cincinnati, with emphasis in geomechanics, engineering geology, and hydrogeology. Over the years Bill has worked on projects involving slope stability mapping and analysis, landslide hydrology, land subsidence and fissuring, basin-scale hydrogeologic characterization, heat flow modeling, the mechanics of folding, the statistical characterization of soil contamination, and petroleum geology. He is currently developing mathematical models of deformation above a mid-crustal magma body along the Rio Grande rift. Bill is also an associate editor of *Environmental & Engineering Geoscience* and serves on the management board of the GSA Engineering Geology Division. Additional information and a publication list are available at www.haneberg.com.

Message from the Chair (Sep. 2001)

I'd like to welcome everyone to the start of our 2001 – 2002 year of the AEG Oregon Section. We ended our section season last year with two summer events. In June we had a great field trip to observe slope hazards and alluvial stratigraphy in the Salem area, with lunch at a local winery. Our second event in June was a family night at PGE Park to watch the Portland Beavers baseball game. This year we have speakers lined up for a variety of topics and will be trying out a new place for some of our monthly dinner meetings.

Oregon Section Officers

Your Oregon Section officers will be moving up into their new positions this year and we have new volunteers for several committee chairs. Charlie Hammond will be moving to the position of past-chair after two great years serving as section chair and our representative to the AEG Board of Directors meetings. Ruth Wilmoth will be moving up to chair elect and Warren Krager will be secretary. Rowland French was voted as our new treasurer. Jason Hinkle and Tim Richter have volunteered to serve as new co-chairs for programs. Thanks go to David James for his work as our previous programs chair. Tom Kuper will chair our field trip committee. Tim Blackwood will continue as membership chair. Dave Michael will edit the newsletter and continue as legislative chair. George Freitag has volunteered to serve as chair of the section history committee. Thanks to all of our previous and current volunteers for the hard work and successful leadership.

If you would like to get involved with any of the activities of our various committees, please contact the appropriate chair. Phone numbers and email addresses for the section officers and committee chairs are listed at the back of this newsletter. Also feel free to contact us about any other AEG interests, suggestions, or questions.

Local Dinner Meetings

We're starting the year with our dinner meeting on September 20th at Billy Reeds Restaurant, north of the Rose Garden in Portland. Bill Haneberg, an independent consulting geologist and former Assistant Director and Senior Engineering Geologist with the New Mexico Bureau of Mines and Mineral Resources, will be our speaker. His topic is "A Process-Based Probabilistic Approach to Spatially Distributed Landslide Hazard Assessment". Details on the September meeting are elsewhere in this newsletter. The speaker at our October dinner meeting will be John Beaulieu, Director of the Oregon Department of Geology and Mineral Industries.

Association Dues Increase

The AEG Board of Directors approved an increase in the Association dues effective in the 2001-2002 year. The new rates are \$105 Member and \$95 Associate. The Section dues remain the same at \$10. Your dues statement also has discount subscriptions to the monthly AGI (American Geological Institute) earth sciences newsmagazine "Geotimes" and the International AEG publication "Engineering Geology and Environment".

AEG Annual Meeting

The 2001 AEG annual meeting will be held in St. Louis, Missouri on September 30 to October 5. Technical sessions are on October 3 to 5. Charlie and I will be attending the AEG Board of Directors meetings on October 6 and 7. I'll report on the board meeting in future newsletters.

Welcome back again to returning, new, and prospective members.

Drew Harvey
AEG Oregon Section Chair

Message from the Chair (Out-Going)

As the outgoing Chair, I would like to thank a few people for their support during my term. My deepest appreciation goes to counsel, Past Chairs Dave Michael and Scott Burns. They have helped me with their insight and answers to many questions. Our section continues to benefit significantly from their participation. Thanks to Andrew Harvey for his steady support and preparation to take over the Chair; Ruth Wilmoth for her enthusiasm and spirit; and Warren Krager for his attentive preparation of financial reports. Your section is in good hands.

Thanks also to our volunteer Committee Chairs: Tom Kuper, Tim Blackwood, Jason Hinkle, Dave Michael, Tim Richter, and George Freitag. These are members who make a difference.

Charlie Hammond
AEG Oregon Section Chair (Out-Going)

Short News Items

Green Briefcases: Remember those green briefcase bags that we have left over from the Seattle annual meeting? Well, now is the time to pick one or more up for \$5.00 each. That's less than you spend for lunch! People that already have one say "they were worth the old price of \$10.00 and I am going to buy another!" Get one before they are all gone!!

E-Mail "Newsletter:" PLEASE TAKE THE TIME TO SWITCH TO THE E-MAIL NEWSLETTER IF YOU CAN This saves the Section money and makes the editor's job much easier please send me your E – mail address to Dave Michael at [**dmichael@odf.state.or.us**](mailto:dmichael@odf.state.or.us)

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

The Board of Geologist Examiners: 707 13th. St. SE, Suite 275 Salem, OR, 97301

Phone (503) 566-2837, Fax (503) 362-6393 e-mail: osbge@open.org
contact *Susanna Knight*, Administrator for assistance with Board issues.

If you have NEWS items that you would like to include, please contact or E-mail Dave Michael – newsletter editor at dmichael@odf.state.or.us

Oregon Section Book: The 1998 publication "Environmental, Groundwater And Engineering Geology Applications from Oregon" Edited by Scott Burns with articles by many Oregon Section members is available from Nature of the Northwest (DOGAMI Book Store –800 NE Oregon St.), Powell's Book Store, Portland State Book Store (corner 5th and Mill), Amazon.com

Special thanks: Thanks to Geo-Tech Explorations, Inc., for sponsoring the drink tabs at our last meeting on May 17 at the Old Market Pub. We had a good turnout as usual for the Old Market pizza feed. Unfortunately, the announcement of Geo-Tech's support for our section did not make into the Newsletter. But then, if it did, maybe we would have been overrun with a huge number of members!

"Seeking Old AEG Annual Directories". If anybody has any pre-1997 AEG annual directories, please email George Freitag at gfreitag@gri.com. George is trying to compile a list of old Oregon Section officers." George Freitag, CEG GRI Geotechnical and Environmental Consultants gfreitag@gri.com Phone (503) 641-3478 Fax: (503) 644-8034

Classes at Portland State in the Fall Quarter

(classes go from Sept. 24 to December 7th).

You can take classes without being enrolled in a degree program. The tuition is the same for instate and outof state students up to 8 hours.

G423/523 Computer Applications in Geology, 4 credits,
MW, 11:30-13:30, Cruikshank, NH 437

G443/543, Groundwater Geology, 4 credits,
TuTh, 16:40-18:30, Fountain, CH 69

G460/560, Soil Geomorphology, 4 credits, MW,
17:15-18:30, Burns, S17

Geog 488/588, Geographic Information Systems (GIS), 4
credits, TuTh 16:40-18:30 (and one lab late afternoon
on Tu,W, TH, F), CH250, new instructor (very good)

CE 549, Deep Foundation Design, 4 credits, MW,
18:00 - 19:50, T. Smith, SB2 139B

CE 579, Toxics in the Environment, MW, 4 credits,
16:00 - 17:50, Bill Fish, SB2 162

Note: 400 numbered classes are undergraduate and are cheaper than graduate level courses. 500 numbered classes are graduate level. The soil class is designed to help geologists use soils to date deposits, determine drainage characteristics, wetland delineation, and help in finding buried soils in cores. It is not a soil mechanics class.

Note for winter quarter. Scott Burns will be teaching Engineering Geology again. This is an excellent review for those wanting to take the CEG exam in spring. More on that course in December.

If you have any questions about any of the above classes, call Scott Burns at 503-725-3389 or email him at burnss@pdx.edu.

Friends of the Pleistocene: The 8th annual FOP trip will be this year in south central Oregon at Summer Lake. Come and join 150 other geologists for a three day trip to see one of the finest Quaternary sections in the North America. To learn more about the trip, see the website at: www.cs.csubak.edu/Geology/Faculty/Negrini/FOPDocs/NWFOP2001.html. There is space in the Portland State van which will be going down Thursday afternoon. Call Scott Burns for details (503-725-3389). Dates are Sept. 28-30, 2001.

Cordilleran Section, Geological Society of America

98th Annual Meeting

Oregon State University, Corvallis, Oregon, May 13-15, 2002

This meeting will be held at the LaSells Stewart Center and CH2M Hill Alumni Center at Oregon State University. Participating organizations include the Northwest Energy Association (NWEA) of AAPG, the Oregon and Washington Chapters of the Association of Engineering Geologists (AEG), the Cordilleran Section of the Paleontological Society (PS), and the National Association of Geoscience Teachers (NAGT). Meeting chair is Bob Yeats, (541)737-1226, yeatsr@geo.orst.edu. Coordinators for participating societies are Jack Meyer (NWEA) at h2m@nwnatural.com, Scott Burns (AEG) at (503)725-3389, burnss@pdx.edu, Jeff Myers (PS) at (503)838-8165, myersj@wou.edu, and Peter Wampler (NAGT) at (541)758-8418, wamplerp@geo.orst.edu.

Convention website is <http://terra.geo.orst.edu/users/gsa2002>

TECHNICAL PROGRAM

THEME SESSIONS AND SYMPOSIA (Andrew Meigs, program chair)

1. **Presenting geology to the public in national and state parks and other areas.** Bob Lillie, (541)737-1242, lillier@geo.orst.edu (NAGT).
2. **The evolving Pacific Northwest landscape: geomorphic and ecologic controls, constraints, and conundrums in the Quaternary.** Gordon Grant, (541) 750-7328, Gordon.Grant@orst.edu
3. **Constraints on Cretaceous paleogeography of the western Cordilleran margin.** Bernie Housen, (360)650-6573, bernieh@cc.wvu.edu
4. **Public policy, floods, aquifers, and river dynamics in the Willamette Basin, Oregon.** Jim O'Connor, (503)251-3222, oconnor@usgs.gov (AEG).
5. **Forearc basin development, microplate rotation, and tectonics of the Tertiary Cascadia margin.** Ray Wells, (650)329-4933, rwells@usgs.gov (NWEA).
6. **Hazards and risks from Cascade volcanoes.** Britt Hill, (210)522-6087, bhill@swri.edu (AEG).
7. **Uplift, erosion, and topography of a steady-state orogenic belt: The Olympic Mountains of Washington.** Mark Brandon, (203)432-3135, mark.brandon@yale.edu
8. **Debris flows: Theory and practice.** Dick Iverson, (360)993-8920, riverson@usgs.gov (AEG).
9. **Unraveling the Tertiary stratigraphy and structure of the Pacific Northwest and its implications for hydrocarbon occurrence and underground gas storage.** Jack Meyer, h2m@nwnatural.com (NWEA/AAPG).

10. **Engineering geology case histories: State of the art and state of practice in the Pacific Northwest.** Scott Burns, (503)725-3389, burnss@pdx.edu (AEG).
11. **Coastal paleodune landscapes.** Curt Peterson, (503)725-3375, petersonc@pdx.edu (AEG).
12. **Active tectonics of Cascadia: Geodesy.** Herb Dragert, (250)363-6447, dragert@pgc.nrcan.gc.ca
13. **Active tectonics of Cascadia: Continental shelf and slope and accretionary prism.** Chris Goldfinger, (541)737-5214, gold@oce.orst.edu
14. **Active tectonics of Cascadia: Deformation across the plate margin onshore.** Ray Weldon, ray@newberry.uoregon.edu
15. **Submarine volcanism and hydrothermal vents in the NE Pacific.** Bill Chadwick, (541)867-0179, chadwick@pmel.noaa.gov
16. **Terrestrial paleontology of the Pacific Northwest.** Jeff Myers, (503)838-8165, myersj@wou.edu (PS)
17. **Decadal symposium on the geology of Washington, in honor of Rowland W. Tabor.** Eric Cheney, (206)543-1163, vaalbara@u.washington.edu
18. **Pacific Northwest geology east of the Cascades: Symposium in honor of George Walker.** Martin Streck, (503)725-3379, streckm@pdx.edu
19. **Applications of Geographic Information Systems in geology and geophysics.** Dawn Wright, (541)737-1229, dawn@dusk.geo.orst.edu
20. **Jurassic tectonics and magmatism in outboard terranes from northern California to Washington.** Greg Harper, (518)442-4476, gdh@csc.albany.edu
21. **Ground water-surface water interactions.** Roy Haggerty, (541)737-1210, haggertr@geo.orst.edu.
22. **Environmental cleanup: Use of hydrogeological and biological principles and GIS.** John Kuiper, (503)639-3400, john.kuiper@agraus.com (AEG).
23. **Natural hazard monitoring and warning systems.** Mark Darienzo, (503)378-2911x237, mdarien@oem.state.or.us
24. **Invertebrate paleontology: Symposium in honor of Ellen J. Moore.** Elizabeth Nesbitt, (206)543-5949, lnesbitt@uwashington.edu (PS).
25. **Quaternary paleoclimates inferred from eolian deposits in the western U.S.** Mark Sweeney, (509)335-5987, sweeney@wsunix.wsu.edu
26. **Surface effects of the Nisqually, Washington, earthquake of February 28, 2001.** Kathy Troost, (206)616-9769, ktroost@u.washington.edu
27. **Catastrophic glacial outburst floods in the Pacific Northwest.** Pat Spencer, (509)527-5222, spencerp@whitman.edu
28. **Innovations in Earth science education: Dorothy LaLonde Stout Memorial Symposium.** Peter Wampler, (541)758-8418, wamplerp@geo.orst.edu (NAGT)
29. **Undergraduate Research Poster Session.** Karen Grove, (415)338-2617, kgrove@sfsu.edu (sponsored by Council on Undergraduate Research).
30. **Volcanic arcs and ores: Links of magmatic gases with porphyry copper and epithermal gold deposits.** John Dilles, (541)737-1245, dillesj@geo.orst.edu

FIELD TRIPS

The field trip chair is George Moore, (541)737-1244, mooreg@geo.orst.edu. Field trips will precede, be concurrent with, and follow the meeting, with a comprehensive field trip guide published by the Oregon Department of Geology and Mineral Industries. Trips start and end in Corvallis except as noted.

1. **Tectonics and magmatism at a propagating rift in the Oregon High Cascades.** Ed Taylor, (541)737-1232, taylore@geo.orst.edu
2. **Paleodune age, origin, and archaeology, central Oregon coast.** Curt Peterson, (503)725-3375, petersonc@pdx.edu
3. **Sweet Home, Oregon, Oligocene flora field study for K-12 teachers.** Larry Enochs, (541)737-1305, enochsl@orst.edu (NAGT)
4. **Upper Willamette watershed integrated environmental field study for K-12 teachers.** Steve Taylor, (503)838-8398, taylors@wou.edu (NAGT)
5. **Hydrogeology of the upper Deschutes Basin, central Oregon: a young Cascade arc-adjacent basin.** Dave Sherrod, (808)967-8831, dsherrod@usgs.gov
6. **Landslides at Kelso, Washington, and Portland, Oregon.** Scott Burns, (503)725-3389, burnss@pdx.edu (AEG)
7. **Geomorphology and hydrology research in the H.J. Andrews Forest watershed.** Julia Jones, (541)737-1224, geojulia@home.com
8. **Miocene molluscan fossils and stratigraphy, Newport, Oregon.** Ellen Moore, (541)758-0314, ellen.moore@cmug.com (PS)
9. **Engineering geology of selected dams in the western Cascades, Oregon.** David Scofield, (503)635-4253, scofield@teleport.com (AEG)
10. **Elastic and permanent strain recorded by river terraces of the Clearwater Basin and Kalaloch Coast, Olympic Mountains, Washington.** Mark Brandon, (203)432-3135, mark.brandon@yale.edu
11. **Josephine and Coast Range ophiolites, Oregon-California.** Greg Harper, (518)442-4476, gdh@csc.albany.edu
12. **Bimodal volcanism and tectonism of the High Lava Plains, Oregon.** Martin Streck, (503)725-3379, streckm@pdx.edu
13. **Geomorphology and Quaternary geology of the lower Deschutes River, Oregon (raft trip).** Jim O'Connor, (503)251-3222, oconnor@usgs.gov
14. **Paleobotany and stratigraphy of the Eocene-Oligocene sequence near Eugene** (during meeting). Jeff Myers, (503)838-8165, myersj@wou.edu
15. **Afternoon trip to winery near Corvallis** (during meeting). George Moore, (541)737-1244, mooreg@geo.orst.edu

SHORT COURSES

The short courses chair is Bob Lillie, (541)737-1242, lillier@geo.orst.edu

1. **Parks and Plates: How Earth's dynamic forces shape our national parks.** Bob Lillie, (541)737-1242, lillier@geo.orst.edu
2. **GIS applications in the Earth sciences.** Michael Wing, (541)737-4009, michael.wing@orst.edu.
3. **Integrating geology and geophysics on PC workstations: 3-D seismic.** Alejandro Garcia, (713)464-6188, agarcia@seismicmicro.com

ROY SHLEMON MENTORING PROGRAM IN APPLIED GEOLOGY. Karlon Blythe, Program Officer, kblythe@geosociety.org Workshop for graduate and advanced undergraduate students about professional opportunities and challenges in the real world. Free lunch provided. Registration required. Local coordinator Scott Burns, (503)725-3389, burnss@pdx.edu

STUDENT AWARDS AND SUPPORT

The GSA Cordilleran Section has funds available for partial support of Student Members or Associates who are presenting papers or posters. Apply to Section Secretary, Joan Fryxell, (909)880-5311, jfryxell@csusb.edu Applications should certify that the student is a GSA Student Member or Student Associate of the Cordilleran Section as of January 31, 2002 and *must be received by February 28, 2002..*

The GSA Cordilleran Section will present cash awards for best and honorable-mention undergraduate and graduate papers, both oral and poster. The student must be both first author and presenter, must be a GSA Student Member or Student Associate, and must be registered for the meeting.

EXHIBITS

Exhibits will be located in the lobby of the LaSells Stewart Center close to the registration desk, all poster sessions, and one of the oral sessions, and close to the pass-through to the adjacent CH2M Hill Alumni Center. The exhibits chair is Cy Field, (541)737-1219, fieldc@geo.orst.edu

REGISTRATION

Registration will be handled by GSA Headquarters. For electronic registration, go to the GSA website at www.geosociety.org for forms. The preregistration deadline is April 5, 2002, and the cancellation deadline is April 12. Onsite registration will be available at the LaSells Stewart Center. Registration coordinator is Jeff Templeton, (503)838-8858, templej@wou.edu.

ADDITIONAL DETAILS

Information about social events (winery visit, trip to Oregon coast) and business meetings will be published in the February, 2002, issue of *GSA Today*. See also the convention website at <http://terra.geo.orst.edu/users/gsa2002> or the GSA website at www.geosociety.org

AEG PARTICIPATION AT THE GSA CORDILLERAN SECTION MEETING, MAY 2002

AEG will be participating at the GSA Cordilleran Section Meeting in Corvallis, Oregon, May 13-15, 2002. A preliminary announcement will be forthcoming in an upcoming GSA Today publication.

This notice is a feeler to determine what the level of interest might be for participating in a special session on engineering geology of landslides. If you are interested in participating in a landslide theme session at this conference, please contact Scott Burns (503-725-3389, burnss@pdx.edu) or Charlie Hammond (503-452-1200, charlieh@landslidetechnology.com). The proposed theme session information is as follows:

ENGINEERING GEOLOGY CASE HISTORIES OF LANDSLIDES

GSA Engineering Geology Division; Association of Engineering Geologists

Scott Burns, Portland State University, Portland, OR, and Charles Hammond, Landslide Technology, Portland, OR

Landslides are intimately connected to geology, and engineering geologists are a critical part of landslide investigation, modeling, analysis and mitigation. Experienced practitioners will provide insights into critical issues of landslide evaluation, and case histories covering a variety of landslide impacts at various levels of owner requirements.

CONCEPT OUTLINE FOR THEME SESSION

Presentations could include one or more of the following topics:

Introductory

When are Slides a Risk to Man and/or Environment
Understanding Owners Needs and Abilities
Mapping and Modeling
Methods of Investigation and Monitoring
Stability Analysis and Understanding Factor of Safety
Mitigation Techniques

Settings

Home, development, railroad, highway, forest, utility (gas, water, power, other), marine, mining, other

Level of Evaluation

Seat-of-the-Pants
Limited/Specific
Thorough
Cost is Not an Issue

Other topics are also encouraged

AEG "Oregon Section" - OFFICERS

Area codes are 503 unless noted:

Position	Name	Daytime	Home	FAX
Chair	Andrew Harvey e-mail: aharvey@kleinfelder.com	644-9447	617-9486	643-1905
Chair Elect	Ruth Wilmoth e-mail cgivanc@aol.com	(360) 944-7397	(360) 944-6985	
Secretary	Warren Krager wkrager@kleinfelder.com	644-9447	684-4902	643-1905
Treasurer	Rowland French e-mail rowland@nga.com	(541) 757-7231		(541) 757-7331
Past Chair	Charlie Hammond e-mail: chammond@cornforthconsultants.com	452-1100	274-1437	452-1528
Program Chairs	Jaon Hinkle Jhinkle@odf.state.or.us	(541) 9457468	(503) 626-2968	
	Tim Richter Tim_richter@urscorp.com	948-7213		222-4292
Membership	Tim Blackwood e-mail: tblackwood@carlsonesting.com	684-3460	631-7996	670-9147
Field Trips	Tom Kuper Dkuper@cybcon.com		638-9722	638-9723
Section History	George Feitag Gfreitag@gri.com		641-3478	644-8034

MEMBERSHIP

For application forms for Membership in AEG (Member, Associate, Affiliate, or Student), call Tim Blackwood the membership chair at (503) 684-3460 (w). He will also have copies at the monthly meetings. Membership is on a calendar year basis. If you are an AEG member, headquarters will also collect our Oregon Section 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 an AEG member, fill out the form below and mail to Dave Michael. Note: the following form is only for people and organizations that wish to subscribe to the Oregon AEG Newsletter without being members of AEG.

APPLICATION FOR OREGON SECTION, AEG "NEWSLETTER MAILINGLIST ONLY":

NAME _____

AFFILIATION: _____

MAILING ADDRESS: _____

TELEPHONE: _____

Mail form and \$10 to Dave Michael c/o ODF NWOA, 801 Gales Creek Rd. Forest Grove OR 97116

ANNOUNCEMENT OF OUR NEXT MEETING

Sep. 20, 2001
AEG

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