



APRIL 2006

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Vote for your new Officers
Geology Spotlight: University of Idaho
and More!*



From the President

This will be my last message as President of the Pacific Northwest Section of the National Association of Geoscience Teachers. I am absolutely pleased to announce that that over the last four years since I took the position in May 2002, there have been no sex, political or bribery scandals, no immoral wars or police actions, no cost over runs or record budgetary deficits, no hijacking of the science community and their evil subversive philosophies, or anything else that seems to be inherent to positions of such public power. Let me clarify. None of these dubious activities have occurred within the Northwest Section of NAGT.

In 2002 when I took the position by an underwhelming mandate (a unanimous total of 12 votes out of a possible 130), I made it my primary goal to try and get more folks involved with the section. And like my predecessor, the effort has yielded little fruit. I must say that if it were not for the same 10 or so individuals that consistently and devotedly respond to pleas for help and participation, this section would be downright dead in the water. It is funny that whenever I meet with folks involved with the national NAGT, they often cite the Northwest Section as the poster child for how a section can be revitalized and become robust once again. Well, unfortunately that is definitely not the case. Yes, each year our membership remains about the same at around 130 members, and I am sure the national folks are grateful that you all pay your dues on cue. But the bottom-line is that other than our annual conference and the three newsletters that go out each year, this section does little else. With each newsletter I try to put on a happy face and encourage ideas and contributions from the section, but other than those 10 or so devoted individuals, I have heard nada, nill, neyt from any of you. It is time for a change in the section leadership and I do hope that the person that follows me can be more successful at stirring up the masses and getting the section more involved on the national level. By the way, as of writing this diatribe, we have received officer nominations (for the upcoming election) from only one member. Boy, I sure hope more of you than that will actually vote this spring!

“Many would argue that science has been progressively hijacked...”

I am certain, however, that your casual connection to our Section is a consequence of your commitment to crucial local, state, and national educational (and social) issues. So much more is happening in regards to science and science education in this country and not all of what is happening involves outcomes to our core values as science educators. Over the last five or so years, many disturbing trends have been occurring. Many would argue that science has been progressively hijacked by the president and his administration in ways which will favor the economy and industry in general. The discussions on global climate change are conclusive when we hear from earth scientists. But when we listen to the administration, it is completely uncertain what is occurring with regards to climate trends. And the administration comments always forcefully conclude with a statement which suggests trillions of dollars of negative impact to the national economy. The same approach is being taken in regards to wetlands, habitat and endangered species issues. Recently President Bush proposed a plan which would sell small amounts of public lands to pay for national education funding. Some states are following suit with regards to state public lands. Selling public lands to fund education? Cutting social and educational programs while our adventures in the Middle East mount to what appears to potentially be in the trillions of dollars.

On the state level, budget shortfalls imposed by short-sighted, unimaginative, pro-industry minded public officials are forcing many state surveys into serious cutbacks to a point of scientific and regulatory impotence. Earth science libraries are being closed to address budget issues. Creationism under the guise of intelligent design has reared its ugly head fueled by conservative, fundamentalist agendas that may indeed seriously impact how science is (or isn't) taught in this country. Enrollments in many undergraduate and graduate science and engineering programs are on the decline in this country and a recent TIME article cites how we are losing our global dominance on science education and research. Many argue that there is no need to worry, that the market will take care of itself. Yet what is keeping many graduate programs in physics, engineering, and earth science alive in this country? The acceptance of greater numbers of foreign students to offset the dramatic declines in U.S. student enrollments into science. Is this a good trend? You decide.

“Is this a good trend? You decide.”

These are just some of the issues facing us now and in the future of science education. NAGT should be a part of how these issues are discussed and addressed. Not only on the national level but on the section level as well. We are still waiting to hear what the organizational statement in regards to intelligent design is. This organization has an opportunity to help shape the future of earth science education in this country but it needs active volunteers willing to speak out and become involved in both the political and the educational process. For four years I have asked repeatedly and politely for your help. As of writing this message, we have received a grand total of one submission for election nominations. **One.** Participation by section individuals continues to be less than encouraging.

What does NAGT mean to you? All I can do is speculate what it means to you. As an earth science educator, you may feel a professional obligation to being involved with an earth science education organization. So

“What does NAGT mean to you?”

you pay your dues and keep your membership current on your impressive resume. It may also mean that for the meager \$35 a year in annual dues, you anxiously anticipate getting the JGE publication and you stay updated (while sitting on the toilet) on all the new and incredibly cutting edge teaching techniques and pedagogies presented in the journal. It also means you get invited to the annual conference each year that is put together by a very few, hard working, well intentioned individuals. And, maybe, just maybe, this will be the year that you attend, assuming that it fits conveniently into your busy schedule. That is it. That's what being a member of the Northwest Section means to you. And that is great but the section needs help and it needs it now. Please consider getting more involved. Please consider contacting your local elementary, middle and high schools in order to **nominate a deserving teacher for the annual OEST award.** Please **consider nominating your teaching assistant** for an **Outstanding Teaching Assistant award.** Please consider writing the newsletter editor and web site coordinator with any earth science education news from your area. Please do something more for your section other than just writing your annual dues renewal check. At the very least, **vote for the section officer positions** and **please consider attending the annual conference in Bellingham.** However, the national folks at NAGT do appreciate that you keep sending that check.

Partners in Science Grant Winners

An M.J. Murdock Charitable Trust Partners in Science grant was recently awarded to **Jo Martens**, a science teacher at Centralia High School, and **Pat Pringle** of Centralia College, Centralia, WA. The title of their project is "Use of radiocarbon dating and dendrochronology to investigate a submerged forest in Mud Bay (Eld Inlet) near Olympia, Washington". This grant program allows research opportunities for high school science teachers to work with academic researchers in cutting-edge research projects during two summers. They will begin their project this spring. For more information about the grant, please access <http://www.murdock-trust.org/>.

We also extend congratulations to **Pat**, for his previous 'Partners in Science' grant, on which he collaborated with **Rusty Weaver** of Heritage High School (Vancouver, WA). To see details of their project, please go to: http://www.dnr.wa.gov/geology/pubs/dgernews/dgernews_v1no1.pdf

PNW Section ELECTIONS!

Please take time to vote for Section positions, including officers, state councilors and OEST coordinator. Because of the low response to our call for nominations (one), I invite you to also write in your own nominations. Nominating yourself...is welcome! The ballot form, found at the end of this newsletter, can be cut/mailed (address indicated on ballot), or votes can be emailed to: cstrickland@yvcc.edu **Ballots must be received by May 15th**. Thank you for taking the time to participate in your Section!

A Look towards 2007 ...

NAGT Pacific NW Section Meeting

In 1999 it began again in Spokane, Washington; 2000—Portland, Oregon; 2001—Bellevue, Washington; 2002—Corvallis, Oregon...with GSA Cordilleran section; 2003—Juneau, Alaska; 2004—Wenatchee, Washington; 2005—Coos Bay, Oregon; 2006—Bellingham, Washington; 2007—???

Before we get to Bellingham, it would be terrific to have our sights set on where the 2007 meeting will be held. Having spearheaded the 2005 meeting, I know having a year to iron out some of the details is important. You can see from the list, some of the meetings have been hosted by departments with multiple members, other have been solo departments. Regardless, now is the time for someone to come forward to host the 2007 meeting. With all of the experience from past hosts, there is a wealth of information and ideas to help get the planning started. It looks like it's time to head east...maybe Idaho, eastern Oregon... If you're interested in hosting, please drop me a line at rmetzger@socc.edu. The

annual meeting has been one of the constants in this organization for the past eight years; it's time to get ready for the ninth.

Ron Metzger, Southwestern Oregon Community College

Geologic Tour of the Priest River Metamorphic Core Complex

June 2-4, 2006

The Northwest Geological Society (NWGS) will be sponsoring a field trip on **June 2-4, 2006**. Trip leader **Dr. Ted Doughty** of Eastern Washington University will guide participants on a geologic tour of the Priest River metamorphic core complex.

The Priest River Complex is one of several Late Cretaceous, Early Tertiary metamorphic core complexes throughout the Pacific Northwest. This trip will examine some world class outcrops, which exhibit "classic" core complex features including (but not limited to) upper and lower plate mineral assemblages, a variety of deformational and mylonitic fabrics, plutonic relations, the infamous Newport fault, and last but not least, a rare occurrence of an aluminosilicate "triple point" assemblage. This trip will be a unique opportunity to get "inside" a Pacific Northwest metamorphic core complex and see what all the excitement is about!

Contact **Andy Buddington** (abuddington@scc.spokane.edu) for more information.

State by State

British Columbia, Yukon, Idaho, Oregon & Washington

Oregon

Frank Granshaw, Tom Lindsey, State Councilors



- **Oregon Science Teachers Association (OSTA)** is holding their annual conference on Friday, **October 13th**. The theme is "Science on the Wild Side" and will be held at Roseburg High School in **Roseburg, Oregon**. Conference registration and session forms can found at <http://www.oregonscience.org/conference.htm>

Washington

Joe Hull, State Councilor



- **Rob Viens** of Bellevue Community College is currently Chair of the Life Sciences Program at BCC. Rob also continues to teach classes in the geology department.
- **Beth Pratt-Sitaula** recently joined the faculty at Central Washington University. She has a joint appointment in Geological Sciences and Science Education.
- **The University of Washington Department of Earth and Space Sciences** is back in Johnson Hall on the main campus after an extensive remodel.

by Dennis Geist

The University of Idaho is situated in one of the best places in the world to study geology, set amongst Cascade volcanoes, the Rocky Mountains of Canada and the United States, the world's largest flood deposits, and the world's best continental hotspot. Courses ranging from seismic hazards to orogenic systems to volcanology make use of our setting, with field-based instruction. With a dozen faculty members, the department is small enough to offer an individualized graduate program, but we also have a unique partnership with Washington State University that gives us the resources equal to that of any major research university in the country. We offer more than rock-based research, with an especially strong program in shallow-earth systems, including geomicrobiology, hydrogeology, and aqueous geochemistry. Almost all of our graduate students are supported on research and teaching stipends, and we have great scholarship opportunities.

What is it like being a new graduate student at the University of Idaho? The first weeks of grad school are a whirlwind. Almost everyone has moved from at least hundreds of miles away, and some from as far away as different continents. Once a student has new living quarters settled, he moves into an office at work. Then, she starts a new job as either a teaching assistant, teaching stuff learned

just a year earlier, or a research assistant, applying new computer or lab techniques. Field trips sometimes begin before the start of school, and students are almost assured that September will involve a trip to the Cascades for volcanology, to Yellowstone for aqueous geochemistry, to the Steens Mountains for hydrogeology or geomicrobiology, or across British Columbia for tectonics. Fall is also the time for a welcoming picnic and bitter softball rivalry with WSU.



Students study petrology of Montana's Stillwater Complex.

Photo by D.Geist.

Most students take three classes each semester of their first year. Most of these are in a specialty, although most students take an undergraduate course or two to make up for something they didn't have as an undergrad. To some, especially those from liberal-arts colleges, it can be a bit shocking to focus everything on one subject. Some students come to grad school knowing what their thesis will be on, either because an advisor has a project or the student knows what she wants to work on. Otherwise, the student and

advisor will work the first year to design a project that interests them both.

Almost all students head out into the field or into a lab during their first summer. This past year, students worked in the western U.S., Iceland (on two separate projects), and the Galapagos. Others worked in labs, measuring the solubility of tungsten in geologic fluids, the crystallography of asbestiform minerals, the ages of detrital zircons from the Paleozoic of Argentina, and developing new algorithms for visualizing microtopography of recent fault scarps. Professor Oldow took a group of students on a mapping project, which resulted in the students presenting a paper on their work at the Geological Society meeting.



Exploring Hawaii's geology; student field trip.

Photo by D. Geist.

The second year and beyond of graduate school is almost completely different. Students take very few courses and are almost completely devoted to their thesis research, although there are still picnics and field trips. The spring brings about a whole new experience, the pressure of finishing a thesis. Fortunately, for most students, the days of writing a 300-page tome are history, because students can choose to write a manuscript or two in the style of a published paper. In fact, most theses from the University of Idaho are in manuscript form and eventually published.

What do our students do when they graduate? Most PhDs go on to teach at the college level, do research, or work in the minerals or petroleum industries. Over the past 20 years, the environmental industry has been the main employer of our M.S. graduates, but in the past few years, more students have been hired in petroleum or minerals exploration, and we have close to a 100% employment rate.

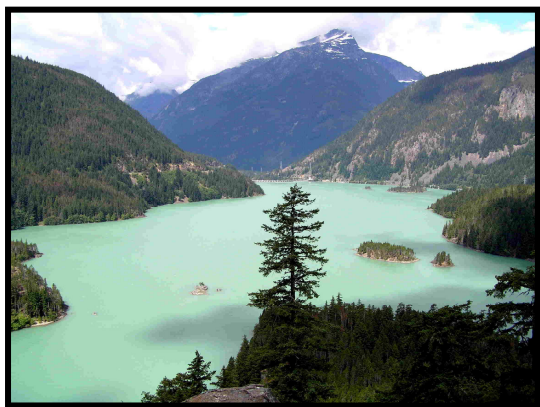
Geosciences Website: <http://geoscience.uidaho.com/>

Call for Papers: GSA Annual Meeting Philadelphia, PA, October 22-25, 2006

Addressing Present and Future Energy, Mineral, and Water Issues in the Classroom: The Need to Prepare Both Educated Citizens and Geoscientists. Rapidly developing economies, such as China and India, have dramatically reversed three decades of decline in the importance and teaching of mineral and energy resources. The traditional short term (~4-year) boom and bust cycle that characterizes mineral resources is being replaced by a long term global supercycle. Significantly greater global demand requires an increased number of geoscientists in the exploration for, production of, and environmental stewardship of geologic resources. It also requires a better educated citizenry to deal with land-use, national security, economic, and a wide variety of environmental issues related to mineral and energy resources. Earth science educators must now envision these changing growth, consumption, and production issues on the global scale and consider these issues within the earth science curriculum as well as education of the public in general.

The bulk of the session will be an opportunity for educators to present papers on innovative teaching methods that integrate the understanding and awareness of geologic resources with social responsibility. Topics will include energy, metallic, nonmetallic, and water resources. By discussing these issues now, earth science educators can address the future needs of students and industry along with the global society in general. We seek best practices at the classroom, curriculum, and public levels. Possible examples include lab exercises, resource courses, informal education activities, and experiential learning.

Abstract submission deadline is midnight July 11th. Session organizers: **Andrew Buddington** (Spokane CC, abuddington@scc.spokane.edu) and **Eric Cheney** (University of Washington, vaalbara@u.washington.edu)



*Diablo Lake, one of field trip destinations on June 22nd.
Photo by Scott Babcock.*

NAGT Pacific NW Section Annual Conference, Bellingham, WA June 22-25, 2006

Western Washington University (WWU) is hosting this year's annual meeting of the Pacific Northwest Section of the NAGT. Field trips (of course!) and a day of talks are planned. This year's field trips focus on the spectacular and unique geology of northwestern Washington, specifically the San Juan Islands, and the North Cascades. A half-day trip to explore the local geology is also planned. On Saturday, June 24th, time is available in the schedule for additional talks. If you are interested in presenting, please contact **Ralph Dawes** at rdawes@wvc.edu. He is eager for your submission.

Schedule:

WED., JUNE 21, 5-7:00 pm: Social event.

THUR., JUNE 22, 8:00 am-5:00 pm: Field trip along North Cascades Highway to Liberty Bell, all-day. Field trip leader: **Prof. Scott Babcock**, WWU.

FRI., JUNE 23: Field trip to Lopez & Fidalgo Islands. Trip leaders: **Profs. Ned Brown/Liz Schermer**, WWU.

SAT., JUNE 24: Presentations, Room ES100 WWU. Coordinator: **Ralph Dawes**. Schedule pending; *see "Call for Papers"*.

SAT., JUNE 24, 5-9:00 pm: Social & barbecue at lodge on Lake Whatcom.

SUN., JUNE 25: Half-day field trip of local geology. Schedule pending.

Limited space for accommodations is available at various motels/hotels in Bellingham; some motels/hotels are already completely booked because of a soccer tournament. On-campus housing at WWU dormitory (Gamma) provides twin beds with a bathroom shared by four people in a given unit. Rates and reservations for dorm housing are available on the attached registration form; please submit by the deadline date of May 10th (and please do not contact WWU housing directly). Participants, of course, are free to make their own arrangements.

Field trip costs include van rental (no tag-alongs) and lunch. The Lopez/Fidalgo Island trip has a higher cost due to ferry fees. The fee for the Saturday barbeque includes a chicken or ham dinner, in addition to the usual picnic fare (corn-on-cob, et al).

Costs and registration material are included in this newsletter (see next page). Attending the conference is an excellent opportunity to become more active in the section. Not only will you meet your PNW geoscience colleagues, have a blast on some great field trips and learn the latest news, you will also have a chance to prove our Section Pres.'s concerns wrong (see pg. 1)you **DO** care about the Section's success, and you **WILL** participate! **Conference website:** <http://www.wvu.edu/NAGTPNW/>

NAGT PNW Section Conference Registration Form

Name _____

Mailing address _____

Email address _____

Telephone _____

General registration: \$10 before May 10, \$15 after May 10.....\$ _____

Accommodations and Parking:

_____ Will make own arrangements off campus

_____ WWU dorm, single room, \$41/night

How many nights? _____

Circle which nights: Wed., Thur., Fri., Sat.....\$ _____

_____ WWU double room, \$27.15/person/night

Name of 2nd person _____

How many nights? _____

Circle which nights: Wed., Thus., Fri, Sat. \$ _____

_____ Dorm Parking, \$30 (flat rate for 2-7 days)\$ _____

_____ Other Parking lots \$5/day (Free on Sat. & Sun).....\$ _____

Field trips

_____ North Cascades, \$30.....Number of tickets _____ \$ _____

_____ Lopez/Fidalgo Islands, \$40.....Number of tickets _____ \$ _____

Barbecue (Saturday evening), \$20.....Number of tickets _____ \$ _____

TOTAL COST (Amount enclosed) \$ _____

Do you have any dietary or physical restrictions which should be considered?

Mail form and check to: Bob Christman
Geology Dept. 9080
Western Washington University
Bellingham, WA 98225-9080

For further information: Telephone 360-650-3587 or email: xman@cc.wwu.edu

Visit our website: <http://www.nagt.org/nagt/orgainzation/northwest>

Call for Papers

NAGT PNW Section Conference, June 22-25
Conference Day, Saturday June 24



The full meeting day will be a forum of talks about earth science education and geological research in the Pacific Northwest. Participants are invited to make a presentation about their teaching or research. Please complete this form.

Name: _____

Address: _____

Title of presentation: _____

Short description to be printed in the program: _____

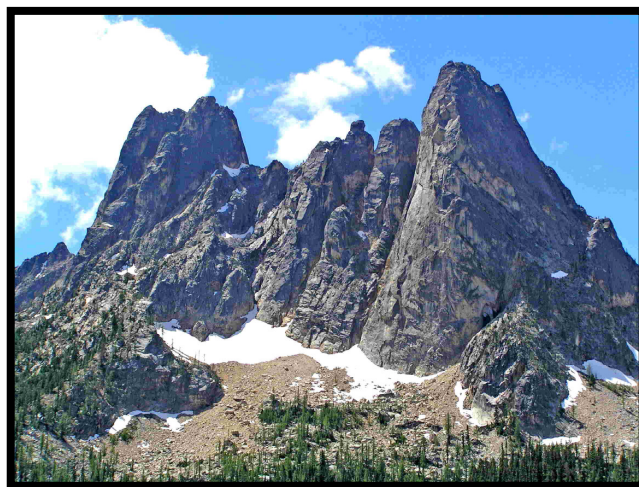
Estimated time: _____

Audio/visual equipment which WWU needs to provide: _____

Conference day program will be coordinated by
Ralph Dawes.

Send this form by May 10 to:

Ralph Dawes	or	Bob Christman
Natural Science Division		Geology Dept. 9080
Geoscience Dept.		Western Washington Univ.
Wenatchee Valley College		Bellingham, WA 98225-
9080		
1300 Fifth Street		
Wenatchee, WA 98801		
Rdawes@wvc.edu		xman@cc.wwu.edu



*Liberty Bell, another field trip destination for the June 24th
North Cascades excursion. Photo by Scott Babcock.*



Pacific Northwest Section

Election Ballot

Participate! Please Help the Section by Voting!

Indicate your choice for each office and mail to the address provided below.

PRESIDENT: ☐ Ralph Dawes ☐ _____

VICE PRESIDENT: ☐ Ron Metzger ☐ _____

OEST COORDINATOR: ☐ Frank Granshaw ☐ _____

TREASURER: ☐ Bob Christman ☐ _____

SECRETARY: ☐ Bob Christman ☐ _____

NEWSLETTER EDITOR: ☐ Cassandra Strickland ☐ _____

STATE COUNCILORS: **WA:** ☐ Jeff Tepper ☐ Joe Hull ☐ _____
Please vote for 2 per state

OR: ☐ Tom Lindsey ☐ _____

AK: ☐ Cathy Conner ☐ _____

ID: ☐ Shawn Willsey ☐ _____

BC: ☐ Brett Gilley ☐ Mary Lou Bevier ☐ _____

WEB PAGE COORDINATOR: ☐ Jenny Thomson ☐ _____

EMAIL TO: cstrickland@yvcc.edu by May 15th, 2006

OR

MAIL TO (must be postmarked by May 15th, 2006):

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Grandview, WA 98930