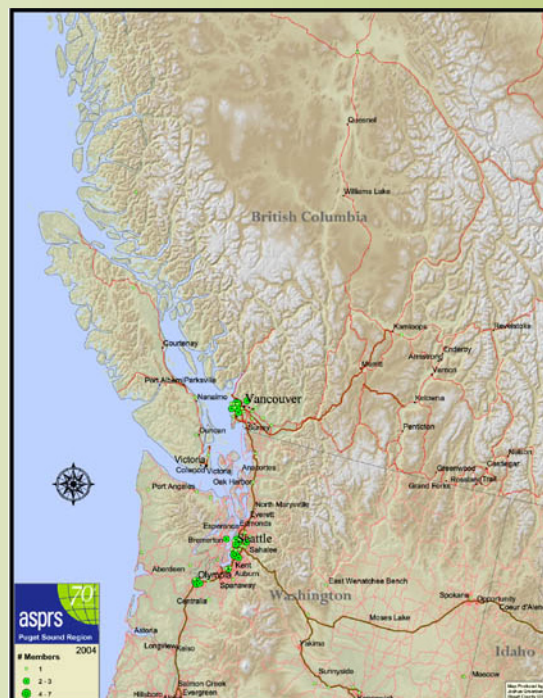




American Society for Photogrammetry
and Remote Sensing

PUGET SOUND REGION

Fall 2010 Newsletter



Message from the president



Hello Region Members,

It has been a while since we have sent out a newsletter. We have had a lot of changes in our region the last few years.

This summer our newly elected President, Keith Wolf, had to step down from the position. Like many of us, the demands of our profession have made it difficult to commit to a volunteer position.

We want to thank Keith for the work that he did when he was on the board. His most significant accomplishment was to organize a joint workshop with ASPRS and the Pacific Aquatic Monitoring Partnership (PNAMP) in spring of 2009. The workshop was held in Shelton, WA.

This is the type of outreach that scientific organizations must have to be successful and share knowledge. Keith is still active with PNAMP and is committed to continue this outreach with ASPRS.

I have agreed to continue being the President of the Region until next spring when Monika Moskal our President-Elect will take over. Monika is a PhD in Remote Sensing at the University of Washington and the faculty chair of the UW student chapter. She previously served on the board in the Central Region.

Our current Vice-President is Chris Beasy, GIS Specialist with Klohn Crippen Berger, an engineering and environmental consulting firm in Vancouver, BC. Chris has a great background in mapping and GIS. Chris's commitment helps maintain the tradition of alternating board members in Canada and the US. We are the only ASPRS region that spans an international border.

Columbia River Region – Puget Sound Region Annual Technical Exchange

We have set the date for our CRR-PSR Technical exchange! This year it will be held on October 29th at the Vancouver Water Resource Center in Vancouver, WA. This is the same location that we have used for the last several meetings. It is a great venue! The last several meetings have been well attended and we average about 50 attendees.

There is always a good mix of student and industry presentations. Please try to attend. We will be sending out a call for speakers and registration forms soon.

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Message from the president

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Membership

The current economy is affecting all professional memberships and ASPRS is not unique. There are several factors that are contributing to declining memberships.

The most tragic is that many members have been laid off. Another factor is that companies that traditionally sponsored memberships can no longer afford to do so. Students simply can't afford the dues.

To overcome these challenges we have to increase the value of the membership. Many members have asked me "What are the benefits to being a member?" The short and long answer is networking.

As a region we need to have more networking opportunities that allow members and guests to interface with their colleagues. This is an area where we have fallen short. Out of convenience our board meetings are now held on conference calls where only the board members are invited. We have included our AGM with the spring meeting in Canada making it difficult for the US members to attend.

As a region, we have not supported the Walker Cup golf tournament that ASPRS and LSAW jointly hold each year.

My suggestion would be a regular happy hour in a central location. Another would be to attend the ACSM meetings that they hold quarterly in Bellevue and Seattle. I am active with their board, and they would be happy to have us attend (they have the same issues).

If you did not know, ASPRS will help sponsor past members that have lost their job. Send me your circumstances and I will see if we can get you back on board.

I would like to get any input and ideas from the members to help increase everyone's involvement and everyone's benefit from being a member of our region. Please email or call me if you have ideas and suggestions.

Dave Brown, CP
David.Brown@terrareMOTE.com
(425) 233-1925

National Conference in San Diego

The ASPRS national conference was held in San Diego April 26 to 30. This year's theme was "Opportunities for Emerging Geospatial Technologies".

The event was held at the Town and County Hotel, which is like a compound with several meeting rooms and restaurants scattered over the grounds. Unfortunately many people stayed at neighboring hotels to save costs, a sign of the times. I was expecting the attendance to be down this year because of the economy, but it seemed to be well attended. I have not heard the actual numbers.

The conference was structured with the ASPRS organizational meeting and workshops early in the week with the technical sessions starting on Wednesday and ending on Friday. I attended the Regional Officers meeting and the Membership meeting. Both were focused on dealing with the issues of recruiting new members and maintaining existing members.

There were fourteen technical workshops held on Monday and Tuesday. There were workshops for photogrammetry, LiDAR and radar technologies. There was also a workshop for ASPRS certification and for marketing a business.

The ASPRS is now hosting Webinar workshops throughout the year. Pay attention to the website to see when the next one is scheduled. Also on Monday and Tuesday there were several user group meetings hosted by software and hardware vendors.

The keynote address was given by Dr. Jonathan Overpeck, the director of the Institute of the Environment at the University of Arizona. His address focused on global warming and the dire impacts that it will have on our environment and how our technology is crucial for measuring and monitoring climate change.

As always there were many excellent technical sessions. Many were focused on the rapidly emerging digital camera market and how it is changing our industry. There were also many sessions devoted to LiDAR. The proceedings are available to members on the ASPRS website.

The exhibit hall attendance seemed to be down from previous conferences. There were several hardware and software vendors but fewer service providers exhibiting this year. The social event was held on the USS Midway, a decommissioned aircraft carrier that has been turned into a museum. ASPRS always hosts great events at their conferences.

I was expecting this year's conference to be a little subdued but was pleasantly surprised by the attendance and content. Then again, it is never hard to visit San Diego. The next conference will be the fall event in Orlando. The next national conference is going to be in Milwaukee.

-Dave Brown, CP

ASPRS Puget Sound Region Spring Technical Exchange

The ASPRS Puget Sound Region Spring Technical Exchange / Info Session was held on April 7th of 2010.

This event was held at both BCIT in British Columbia and UW in Washington. Video Conferencing allows speakers and participants to attend either location, depending on travel needs.

Here is a quick breakdown of the topics discussed at the meeting:

Spring Technical Exchange Agenda		
9:00-9:20	Registration	
9:20-9:50	Jesse Joe	Effective Data Capture - An Integrated Process
9:50-10:20	Nicholas Coops	Advances in understanding the role of forest structure of leaf functioning using remote sensing
10:20-10:50	Christos Koulas	Assessing understory and crown structure in the Sooke Watershed using LIDAR remote sensing
10:50-11:00	Break	
11:00-11:30	BC Hydro	Inundation mapping at BC Hydro a case study
11:30-12:00	Leo Salemann	Polygons, Point-Clouds, and Voxels, a Comparison of High-Fidelity Terrain Representations
12:00-12:20	Paul Gagnon	Sellbrite New Camera Mount
12:20-1:15	Lunch	
1:15-1:45	Dan Tresa	GeoAutomation Mobile Mapping System
1:45-2:15	Monica Mozal	Toward Ecosystem Health and Services Monitoring with Aerial and Terrestrial LIDAR: The Application of Leaf Area Index (LAI)
2:15-2:45	Mark Hird-Rutter	Photogrammetry and Forensic Video Evidence - A reflection on the Braidwood Inquiry
2:45-3:00	Break	
3:00-3:45	AGM	
4:15	Social	Elephant and Castle Pub



Attendance at BCIT



Chris, Mark, and Dave with the "film can" gavel

ASPRS Puget Sound Region Shows a Strong Turnout During the Special Session on Forest Fire Fuel Monitoring with LiDAR

During the 2010 ASPRS Annual Meeting in sunny San Diego I had the pleasure to organize and moderate a Special Session on Forest Fire Fuel Monitoring with LiDAR on Wednesday, April 28th.

The purpose of the session was to bring together early career scientists applying aerial and terrestrial LiDAR to quantify forest structure with potential applications to forest fuel estimation and monitoring. The session generated a good turnout with at least 35 participants, including a handful of attendees from the ASPRS Puget Sound Region. The session consisted of three talks.

The first talk focused on 'LiDAR-based Post-fire Fuels Characteristics in Two Sky Island Forests of Southeastern Arizona' and was presented by Tyson Swetnam, a PhD student with Dr. Steve Yool at the University of Arizona. Yool was also the co-author of this paper. Swetnam will be applying techniques developed by Todd Erdody, the author of the third presentation and the FUSION software pioneered by Bob McGaughey, working for the USDA Forest Service Pacific Northwest Research Station and housed at the University of Washington.

The Santa Catalina and Pinaleño have been studied intensively for over 100 years but the application of LiDAR is a new innovative step to estimating the fuel potential of these forests. Swetnam kept the audience engaged by using a new zooming presentation software (Prezi) that allowed him to easily switch between data, visualization and presentation slides.

The second presentation was by Jeffery Richardson, a PhD Candidate from the Remote Sensing and Geospatial Analysis Laboratory (RSGAL) at the University of Washington. Richardson focused on 'Assessing Forest Structure with Aerial LiDAR in Two Complex Forests'.

Richardson enthusiastically demonstrated the performance of LiDAR-based models of forest structure developed in an arid forest of northeastern Washington in a second similar forest type east of the Cascade crest. Richardson and I, as his co-author, have submitted the work for peer-review and are anticipating the outcome of this process later in the fall. Updates on the research can be found on the RSGAL website at:

<http://depts.washington.edu/rsgal/>

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ASPRS Puget Sound Region Shows a strong Turnout During the Special Session on Forest Fire Fuel Monitoring with LiDAR

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I gave the final presentation, in place of Todd Erdody, whose position with the National Park Service, Southern Cascades Network, as a Lead Fire Effects Modeler prevented him from travelling at this busy time of the year. Erdody worked with me as his advisor at the University of Washington and the presentation entitled 'Estimation of Forest Canopy Fuels through Fusion of LiDAR and Near-Infrared Imagery' was a summary of his Master's thesis work.

The work has now been published in 'Remote Sensing of the Environment' and the citation to it can be found on the RSGAL website.

Both Todd and I agree that the project would not be possible without the assistance of Terry Curtis (the long time Puget Sound ASPRS National Director) from the Washington Department of Natural Resources, who provided access and critical information on the remotely sensed data applied in the research.

The session provided a venue for us to share the work we were excited about with our colleagues and peers and the discussion afterwards carried on for quite a while.

Unfortunately, I needed to leave shortly after to catch a flight back to Seattle. After post-conference discussion with colleagues, I recognized that this session was only a small example of the innovative research and applications that were further presented during the national meeting. I wish I could have stayed longer but UW students were expecting to see me during my regular lecture time in Seattle the next day.

-Monika Moskal

Geospatial Revolution

ASPRS has collaborated with Penn State university Public Broadcasting to produce the four-part "Geospatial Revolution" online video series.

The first episode, which illustrates the benefit of GPS techniques in disasters, was released this past September 15. Watch the video [here](#). The second episode is due out November 2.

Summary of Events of the ASPRS NW Student Chapter at the University of Washington

The ASPRS Student Chapter at UW (also called the UW Geospatial Club) co-sponsored an event with the Society for American Foresters titled "Remote Sensing and GIS in Urban Forestry" on February 24th, 2010.

Dave Brown from Terra Remote Inc. presented his recent work on applying remote sensing to urban forestry. Dave talked about the use of hyperspectral imagery to evaluate fire risks for neighborhoods within California. The hyperspectral imagery was used to determine different roof materials as well as the proximity and quantity of potential fuels, such as vegetation, near houses.

Dave also talked about combining remote sensing techniques with GIS to map tree health within the city of Milwaukee, Wisconsin. Terra Remote Sensing Inc. and NCDC Imaging used hyperspectral imagery with LiDAR to classify ash trees and developed a tool for rapid early detection of the emerald ash borer. The event was well attended with a diverse audience from both the geospatial and forestry fields.

The event was timely as many members of the UW Geospatial Club pair up with urban foresters to develop remote sensing and GIS techniques to study the forests within the Puget Sound.

Recently, Dr. L. Monika Moskal teamed up with the US Forest Service, the Cascade Land Conservancy, and King County to study the connections of human and natural systems, while working across the landscape gradient from urban to rural settlements. The project investigators for this research project are Dr. Kathy Wolf (UW & US Forest Service) and Dr. Dale Blahna (US Forest Service). UW will provide geospatial analysis and related support for forest assessment, forest stewardship capacity, and public health potential, including interrelationships between them.

Several of Dr. Moskal's students are currently working on projects related to this research and hope to share the results with the ASPRS soon. Hyperspectral data was recently flown over pilot sites in Seattle, which will allow students to conduct pilot projects similar to the work presented by Dave Brown, but at a local level.

-Meghan Halabisky
UW Geospatial Club President

Welcome New Members!

ASPRS Puget Sound Region would like to extend a warm welcome to it's newest members!

Active Members

**Chris Beasy
Allison Bruner
Jeff Glickman
Kim David Marshall
Knut Olaf Niemann**

Student Members

**Bryan Attrell
Brent Chamberlain
Colin Ferster
Elizabeth Goss
Franklin Graham
Florine Gugugu
Erik David Johansen
Justin F. Johnson
Trevor Jones
Jeremy Kulm
Aaron McLean
Stephan George Peplow
Nicholas Osborne Soverel
Wilawan Thanatemaneeerat
Olivier Tsui
Andres Varhola**

Student Sponsors

ASPRS Puget Sound Region

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Contacts

President: Dave Brown
President-Elect: Monika Moskal
Vice-President: Chris Beasy
Secretary: Caleb Maki
Treasurer: Dave Brown
Past President: Dave Brown
Newsletter Editors: Chris Beasy / Caleb Maki
Webmaster: Alan Walford
National Director: Terry Curtis

Calendar

Our Regular Listing up UpComing Events

October 29, 2010

*ASPRS Puget Sound / Columbia River Regions Joint InfoSession
Vancouver, WA*

November 15 - 18, 2010

*ASPRS 2010 Fall Conference
Doubletree Hotel at Entrance to Universal Orlando
Orlando, Florida*

<http://www.asprs.org/orlando2010/>

May 1 - 5, 2010

*ASPRS 2011 Annual Conference
Midwest Airlines Center / Hyatt Hotel
Milwaukee, Wisconsin
<http://www.asprs.org/milwaukee2011/>*