

Emerald Forester Gazette



The Emerald Chapter of OREGON SOCIETY OF AMERICAN FORESTERS

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Visit The Emerald Chapter Website Here: <http://www.forestry.org/oregon/chapter/5/>

MEMBERSHIP MEETINGS

February 2014 Meeting

Date: Tuesday February 18th, 2014
Location: GATEWAY BUFFET REST.,
3198 Gateway Street, Springfield
Time: 4:30 PM Exec. Meeting
6:00 PM SOCIAL, 7:00 PM Program
Speaker: Matt Peterson –Willamette NF
Topic: USFS Willamette National Forest
Road Planning Efforts

March 2014 Meeting

Date: Tuesday March 18th, 2014
Location: GATEWAY BUFFET REST.,
3198 Gateway Street, Springfield
Time: 4:30 PM Exec. Meeting
6:00 PM SOCIAL, 7:00 PM Program
Speaker: Aili Gusey – Geologist USFS
Topic: Ancient Missoula Flood and South
Willamette Valley Geology

April 2014 Meeting

Date: Tuesday April 15th, 2014
Location: To Be Determined
Activity: Forest Today and Forever Coop
Event

May 2014 Meeting

Date: Tuesday May 20th, 2014
Location: GATEWAY BUFFET REST.,
3198 Gateway Street, Springfield
Time: 4:30 PM Exec. Meeting
6:00 PM SOCIAL, 7:00 PM Program
Speaker: Bobby King – King Logging
Topic: Alaska Logging Presentation

Emerald Chapter to Co-Host 2015 Oregon SAF State Meeting in Eugene

The Emerald Chapter will co-host the Oregon State SAF meeting with the Wildlife Society of Oregon in the spring of 2015. This event should gather close to 400 attendees.

Planning is currently underway towards creating an excellent atmosphere for a shared discussion on forestry and wildlife issues in our future. Many of the challenges we face today in modern silviculture have roots based in the need to protect ecological functions that provide good opportunity for thrifty forest stands and native wildlife populations of all varieties.

The opportunities for fascinating topics and discussions abound. Please plan to be a member on the team by contacting Emerald Chapter leadership. Your suggestions and contributions are very important.

Evite Reminders

Please respond to Evite invitations and reminders from The Emerald Chapter of SAF when you receive them. Your responses help us give good information to the restaurant host where we gather.

2014 OSAF ANNUAL MEETING – Canyonville. OR. April 30 – May 2

The 2014 annual meeting will be hosted by the Umpqua Chapter from April 30th through May 2nd at the Seven Feathers Resort and Casino in Canyonville, Oregon. Find informational flyer here:

http://www.forestry.org/media/docs/or/annualmeeting/annual_meeting_flyer_14.pdf

January Meeting Recap

Emmor Nile – ODF Salem GIS Staff – Lidar tools and analysis

Notes by Dale Claassen

Similar to radar, which uses radio waves to detect objects or surfaces, lidar (Light Detection and Ranging) uses light reflectance to detect surfaces.

The lidar image processing software can be programmed to essentially strip the trees from an image and show the ground surface. The resulting image shows a much more accurate representation of the surface than can be obtained by “looking” through the vegetative cover on a typical aerial photo. The lidar image is capable of showing small stream channels, old road cuts, the trenches and hills made by high-lead yarding big logs with steam donkeys, and even mountain bike trails. It makes finding old railroad grades—where they may have crossed a draw on a long-gone trestle and be seen now only by the old grade cut on each side of the valley—much easier. In the Trask basin lidar shows a huge mass debris flow that is stable—not failing and moving anywhere—and therefore impossible to detect at ground level.

Lidar gives ODF a tool that could eventually be used to update and improve its stream location GIS layers. It may also be able to be used to detect incised channels and riparian areas. The challenge is to improve the math programming needed to separate pulses to map a particular surface, or show quite small changes in surface shape. Adding hillshade to a lidar image helps the viewer see topography without the need for contour lines.

Lidar can be used to measure tree heights. By subtracting the first return pulse reflected off a tree top from the last pulse reflected off the ground, a tree height can be obtained. The heights are not completely accurate due to the small chance the first return pulse hit the terminal bud and not one of the lateral branches, but give a reasonable indication of stand height. Lidar does not do a good job of differentiating between individual trees in a very dense stand, but if trees are spaced apart the tool could finally allow us to more closely enumerate the actual number of trees in a stand, instead of the usual estimate based on a sample.

ODF biologists are using lidar imagery to detect clumps of marbled murrelet candidate nest trees by mapping trees greater than 125 feet tall with a broad canopy. When pulse returns 125 feet and higher are mapped a different color, the broad canopies show up as a larger colored circle due to their flat top. Field-checking concentrations of those trees give biologists a greater chance of finding nesting-quality habitat.

Lidar has proven very beneficial for generating profiles of stream channels and skyline yarding settings. The logging profiles are saving weeks of layout work running profiles by hand, as the engineers can concentrate on only those areas that are shown to be problematic for yarding.

Lidar is being used in urban forestry to identify different tree species in a city.

Lidar data is collected by mounting sensing units in aircraft flown at medium altitudes. In 1997 lidar imagery was collected with two-meter resolution; in 2008 the imagery had one-meter resolution. That results in very large data file sizes. Emmor’s “thumb drive” is a two-terabyte hard drive. The state’s lidar imagery is

available to anyone who requests it (and provides suitable media for copying). Cost of collecting the aerially-imaged data is around \$0.90/acre, but includes a \$20,000 fixed cost per flight.

Ground-based lidar units are being used by surveyors to create as-built plans of existing buildings. Lidar is also being used to measure permanent forestry plots, where the bole of each plot tree is imaged, allowing tree height and taper and other stem diameter measurements. Emmor says it is conceivable that log processing heads could image a tree using lidar, compute the most valuable bucking solution, and cut it and process it to those lengths.

The Portland-area counties have incorporated lidar into their county GIS systems, as have Lincoln, Polk and Benton counties. DOGAMI has a lidar viewer that shows where in the state the imagery is available.

Lidar is being used for safety, engineering, landslides, channel location, forest inventory, monitoring, recreation, T&E species and archeology.

Did You Know?

SAF members can save up to 55% off prescriptions with the SAF Prescription Discount Card?

Learn more here: <http://myfreerxcard.com/foresters/>

Did You Know?

SAF members can save money by renting cars and trucks through Enterprise?

Make your reservation here: www.enterprise.com/car_rental/home.do

Corporate Number: 16LC135 Company ID: SOC

Did You Know?

SAF members can receive rewards and discounts at online home and garden stores like:

ACE, Home Depot, Lowes, Sears, TSC and more.

Start shopping at: www.saf.achivelinks.com

Did You Know?

SAF members can receive rewards and discounts at online business services like:

ADP, Bestbuy, Dell, FedEx, Office Depot, OfficeMax, Staples, and UPS

Start shopping at: www.saf.achivelinks.com

Did You Know?

SAF members can save money on travel services like:

Travelocity, Orbitz, Southwest, JetBlue, Hotwire, and more

Make your travel plans at: www.saf.achivelinks.com

Emerald SAF Executive Committee News

Information from the December meeting of the Executive Committee.

- 1) The Emerald Chapter will co-host the 2015 SAF State meeting. Formal leadership committee for this event is being planned. An event such as a state meeting takes many volunteers. Your help will surely be needed. Program considerations currently: a joint meeting with the Wildlife Society (TWS) in the first or second quarter of 2015, potential registration of 400 + attendees from SAF and TWS.
- 2) Program planning for membership meetings for the fall of 2014 is underway. If you have a suggestion for an interesting topic or tour please speak up.

Next Exec Meeting: Immediately preceding membership meeting. See notes in above.

ForestEd - SAF's Online Forestry Information Repository...now in Beta

<http://forested.org/>

SAF is pleased to announce that its forestry information and learning portal is now online and ready for beta testing. The website, called ForestEd, will aggregate online forestry content in a single repository to provide the most streamlined possible learning and social experience. Content is broken down into topics, where relevant content from a range of media types and sources including news articles, SAF publications, policy, and SAF's national convention are all in one easy to navigate location. Eventual goals for the site include incorporation of a continuing education calendar and quizzes, encouraging user-driven content by teaching SAF members how to create and manage their own topics, adding content from other educational groups/organizations such as webinars, other publications, course materials, and more. The site is currently open to members, and we are eager for your feedback. If you have questions or comments, please e-mail starrsc@safnet.org (the above item is from a recent Oregon SAF Facebook posting--just one more effort to connect with all of our members!)

A Nickel's Worth of Forestry Education

Douglas County landowners Rick and Audrey Barnes were recently honored as Oregon's 2013 "Outstanding Tree Farmer of the Year" at Oregon Tree Farm System's annual awards luncheon held at the World Forestry Center in Portland.



When Rick and Audrey Barnes purchased 1,262 acres on Nickel Mountain in southwest Oregon, they had no idea of the educational opportunities it would provide. Rick and Audrey purchased the property for the timber asset; however, the property is home of the largest nickel mine in North America.

Read more here: <http://www.forestry.org/oregon/article/38/>

Quotable Quotes

"Don't judge each day by the harvest you reap but by the seeds that you plant." Robert Louis Stevenson

Editor – Ted Reiss

Chair – Tiffany Roddy