

Andrews Forest LTER Monthly Meeting Minutes

Friday, April 5, 2013, 9 – 11 AM

NEXT MEETING: Friday, May 3, 2013. 9 – 11 AM. RH313

Minutes from previous Andrews Forest LTER Monthly Meetings can be found at <http://andrewsforest.oregonstate.edu/pubs/mtgnotes/monthmtg.cfm?topnav=42>

ATTENDEES

Michael Nelson (lead), Lina DiGregorio (notes), Lisa Helmig, Mark Harmon, Charles Goodrich, Jong-Hwan Lim, Lidia Watrud, Ivan Arismendi, Christina Murphy, Linda Ashkenas, Judy Li, Greg Downing, Julia Jones, Fred Swanson, Rebecca Hutchinson, Adam Kennedy, Brad Withrow-Robinson, Theresa Valentine, Al Levno, Mark Schulze, Dana Warren, Tom Spies, Chris Daly, Steve Wondzell, Alba Argerich, Don Henshaw, Kari O'Connell, Fox Peterson, Tina Simončič, Hayley Corson-Rikert

PRESENTATIONS

9:00 – 9:30 AM: Andrews LTER Children's Book, "Ellie's Log, Exploring the Forest Where the Great Tree Fell" by Judith L. Li. Illustrations by M. L. Herring.

Ages 9-12 (Grades 4-6). Companion Teacher's Guide. Color Illustrations. 112 pages.
Presented by author Judith L. Li.

- The book's official launch was April 1, 2013
- We watched the book's trailer online:
http://www.youtube.com/watch?feature=player_embedded&v=7cb6P7-FO_4
- The book's website is <http://www.ellieslog.org> – it has activities for kids, activities for teachers, and other online resources
- OSU Press website <http://osupress.oregonstate.edu/book/ElliesLog>
- The book encourages kids to learn about how we do science. How we ask questions, make observations, test the ideas.
- A teacher's guide is also available (see ellieslog.org website). It will be free online and available at cost from the press in hard copy

9:30 – 10:00 AM: "Trade-offs between Carbon and Forest Products in the west Cascades of Oregon."

Presented by Mark Harmon

- Work by Mark Harmon, Thomas Spies, Warren Cohen, Jeff Kline, Robert Kennedy, Anita Morzillo, Brenda McComb.
- Evaluate trade-offs among select ecosystem services: carbon ,biodiversity, and wood products

- Can we avoid creating tomorrow's problems as we solve today's problems?
- Focus in PNW, take diverse landscapes, and apply trade-of framework, and involve stakeholders and look at alternative futures
- <http://www.carbon-tradeoffs.forestry.oregonstate.edu>

DISCUSSIONS

LTER 7 Survey results. Presented by Michael Nelson

The LTER group participated in an online survey to give feedback on the LTER7 proposal planning process. Michael shared results of the survey with the group.

- 71 responses to the survey
 - Mix of graduate students, post docs, USFS employees, faculty members, PNW researchers, professional staff
- Ecology, biology, forestry, engineering, education, geosciences, social science, humanities, others
- In general, survey takers expressed that they would be willing to take part in the LTER7 planning process
- Survey takers thought that we should have the same number or more disciplines involved and that participant diversity should match the diversity of the research activities that we want to do. None said that we should have fewer disciplines involved
- Central question: should it remain the same? The answers were mixed that we should keep or that we should build upon it or redo it in some way.
- Theme of connectivity was generally well received.
- Future research hopes were that we combine biophysical science and social science and that it should be done in a collaborative and mindful way.

LTER Executive Committee LTER7 Planning Retreat Report

Retreat was to focus on the biophysical science and social science ideas for the proposal

Biophysical science:

Connectivity in our landscape is expressed as flows of air, water, energy and food resources, populations that influence ecosystem structure and functioning

- Hydrologic connectivity: effects of disconnects on productivity, growth, nutrient cycling
- Role of mountainous terrain in defining these flows: implications of more or less connectivity

- Food web linkages: predator-prey influences on processes including decomposition, pollination, primary production

Social science:

Connectivity is the exchange of information/knowledge/resources within the social system structure that gives rise to human responses that, in turn, influence ecosystem management

Socio-ecological connectivity implies an understanding that ecosystem functions affects peoples' lives and ecosystem science is critical for the wise management of forested landscapes

Connectivity within social systems: social and institutional properties that control/influence flow of information that, in turn, influences management activities

Site Use Proposal: "Riparian forest structure and bottom-up drivers of fish production in headwater streams." presented by Dana Warren.

Dana and a graduate student will be working this summer primarily in McCrae Creek and tributaries and in areas of STREON. Paired sites of old-growth and previously cut (60-yr-old) riparian forests. Those different forest structures, light measurements, primary production, vertebrate, fish measurements. Collaborating with Forest Service to also look at area in Green Mountain where the FS will be doing a cut along a fish-bearing stream. Methods in the Andrews creeks will be light measurements, forest structure will be basal area, primary production, open-channel metabolism, invertebrates samples and weight, fish measurements will involve growth with pit tags and weight. Ivan Arismendi will look at stream temperature. Tom Spies suggests using LiDAR to think of about siting the studies and looking at forest structure along the streams. We might be able to predict canopy structure and light using LiDAR. That might help stratify sample to look at variability. Julia suggests looking at wood or rock or presence of large wood to create temperature or light heterogeneity. This will explicitly use the STREON site for old-growth and cut area. Work will probably happen for two years. Al Levno and Steve Wondzell took photos from overhead and there is good coverage of McCrae, after 1996 flood—that data may or may not be useful.

General Announcements

- HJA Day, June 27
- 2013 Rates for Andrews Forest Facilities. Please fill out a reservation request as soon as you know your research schedule:
<http://andrewsforest.oregonstate.edu/iter/about/facility/reservation.cfm?topnav=224>.
- New Publication? Please share your new research papers with us so that others know what you have learned and the Andrews web bibliography stays updated. Send pdf or citations to: HJApubs@fsl.orst.edu
- Need a suggestion of text for acknowledging use of Andrews Forest data and/or facilities in publications?
<http://andrewsforest.oregonstate.edu/iter/acknowledgements.cfm>

- Planning for new research? Please talk with Mark Schulze (mark.schulze@oregonstate.edu).

NEW FACES

Tina Simončič. Working with Tom Spies and others for a couple of months studying forest planning as part of her PdD program in Slovenia.

Hayley Corson-Rikert. PhD student working with Steve Wondzell and with Dr. Mary Santelmann as her co-major advisors and also with Dr. Roy Haggerty. She will be looking at transport of dissolved organic and inorganic carbon (DOC & DIC) from hillslopes and riparian zones to the stream by sampling hillslope and hyporheic water.