



ANDREWS FOREST NEWSLETTER

Fall 2006

EDUCATION PROGRAM— A NEW DIMENSION

Julia Jones (Geosciences), Mark Harmon (Forest Science), and colleagues recently won a National Science Foundation award to develop an Ecosystem Informatics program at Oregon State University. The program was inspired by experience of 30 years of information management at the Andrews Forest. The intent is to train 30 PhD students to work at the interface of ecosystem science and management with information technology and mathematical modeling. The program brings together faculty and students from Computer Science, Mathematics, Bioengineering, and several departments emphasizing biophysical sciences. While not all the work is centered on the Andrews Forest, the program has enlarged the range of disciplines engaged there.

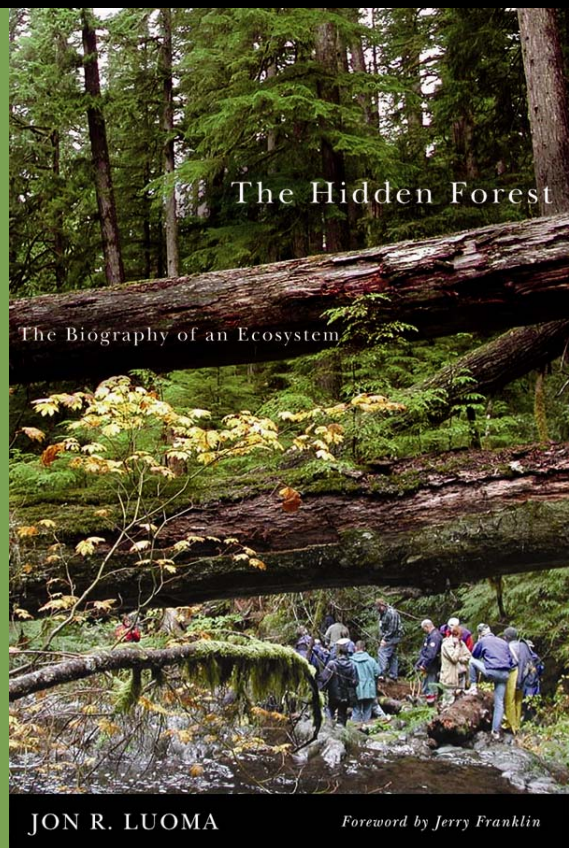
THE ANDREWS FOREST STORY REPRINTED

The *Hidden Forest*, Jon Luoma's engaging story of work at the Andrews Forest, has been reprinted by Oregon State University Press. The first 1999 edition from Henry Holt has been out of print for a few years. A fresh forward by Jerry Franklin brings the story up to date. In the Preface, Luoma writes of Andrews Forest and its scientists,

"Here, in the shadows of this woods, in its rivulets and streams, under its soil, and high overhead, they have discovered a hidden forest."

The main body of the work, told in the first person, creative non-fiction style of John McPhee, remains true to its subtitle – "The biography of an ecosystem."

<<http://oregonstate.edu/dept/press/g-h/HiddenForest.html>>



JON R. LUOMA

Foreword by Jerry Franklin

Photograph by Thomas Dunklin

SCIENCE MILESTONE

Mark Harmon's now infamous 200-year log decomposition study reached its 10% completion point in 2005 and Mark and colleagues celebrated with another round of destructive sampling. In its short 21-year history this project has revealed new findings about roles of log chemistry, biology, and hydrology in shaping the roles of big wood in forest



and stream ecosystems. The principle log-decomposition study site has become the prime stop on field tours with scientists, land managers, students of all grade levels, elected officials, poets, and others to discuss the essence of long-term research and the type of commitment involved in taking the long view.

Log decomposition sample. Photo by Jay Sexton



Mark Harmon

NEW ANDREWS FOREST SCIENCE LEADERSHIP

After six and a half years as Principal Investigator of the Andrews Forest Long-Term

Ecological Research program, Mark Harmon is passing the task to Barbara Bond, Professor of Forest Physiology in the Forest Science Department at Oregon State University. Mark, who is spending a sabbatical year at Harvard Forest, has done a great job in tightening LTER operations and leading new science directions, notably general

considerations of the temporal dynamics of ecosystems. He notes, "It has been a productive and interesting experience for me to lead such a large and active group. Fortunately, the Andrews LTER has been blessed with great depth of leadership talent. I look forward to working on the next chapters of the Andrews story." Barb brings a new emphasis on the function of ecosystems in mountain landscapes, especially how air drainage patterns can be used to measure functions of ecosystems over large scales. "The thought of leading the

Andrews Program would be daunting if it weren't for all of the extraordinarily talented people involved," says Bond. "Everywhere in academia people are talking about the need for multidisciplinary research, but Andrews scientists really walk the talk. For all the great work that has gone on in the Andrews Program in the past, I know the best is yet to come."



Barbara Bond. Photo by Cheryl Hatch/OSU

NEW PUBLICATION

Charlie Halpern and Jim Lutz (both of U. of Washington) recently published "Tree mortality during early forest development: a long-term study of rates, causes, and consequences" in *Ecological Monographs*. This work exemplifies long-term science at the Andrews Forest as it builds on data from plots established in clearcut and broadcast burned areas of Watersheds 1 and 2 by Ted Dyrness in 1962 and then expanded in 1979 by Jerry Franklin to capture the tree component for the young forest. The tree stratum was composed of 14 species, dominated by Douglas-fir. By the third decade after logging, mean density of young trees peaked at more than 3000 per hectare. Over 7000 of the establishing trees died – smaller trees succumbed to suppression mortality in high numbers, but mechanical disturbance by wet snow and wind toppled bigger trees, accounting for the majority of biomass lost to mortality.

A LINK WITH THE HUMANITIES – LONG-TERM ECOLOGICAL REFLECTIONS

An exciting new collaboration between the Andrews Forest ecosystem program and the Spring Creek Project for Ideas, Nature, and the Written Word in the Philosophy Department at Oregon State University brings together scientists and writers in the Forest. The idea is to engage creative, non-fiction writers to reflect on long-term ecological and human change in the forest in much the same ways that ecological scientists do. The program includes special events on themes like new metaphors for restoration of

watersheds, and also a writer-in-residence program at the Forest. Writers in residence include Robert Michael Pyle

*"To peer much further down the line
requires not only empathy for those who follow,
but also faith in the future—
even if you won't be there to see it for yourself...
Maybe looking to the future is a way of hoping
there will still be something to see when we get there.
Maybe it's the only way to make sure of it."*

Robert Michael Pyle from "The Long Haul"
Orion magazine. Sept/Oct 2004.

(author of *Wintergreen*, *Walking the High Ridge: Life as Field Trip*, and other books), Robin Kimmerer (*Gathering Moss*), Scott Slovic (*Getting over the Color Green*), Pattiann Rogers (*Firekeeper and Eating Milk and Honey*), and Alison Deming (*Science and Other Poems* and *The Monarchs: A Poem Sequence*). See the writing by these visitors to the Forest.

<<http://www.fsl.orst.edu/lter>> click on Arts & Humanities.

ANDREWS FAMILY REUNION AT ANDREWS

Virginia Andrews Burns, daughter of H.J. Andrews, brought 14 family members from as far away as Utah for a family gathering and picnic at the Forest last August. This was a chance to share stories about the man and his legacy in the forest named in his honor. The family has stayed in contact with the Forest by attending decadal anniversaries. We appreciate the chance to connect with the next generations of Andrews descendents.

Visiting with the Andrews family helps us recall the many contributions of H.J. Andrews to forestry in the Pacific Northwest. For example, his leadership of

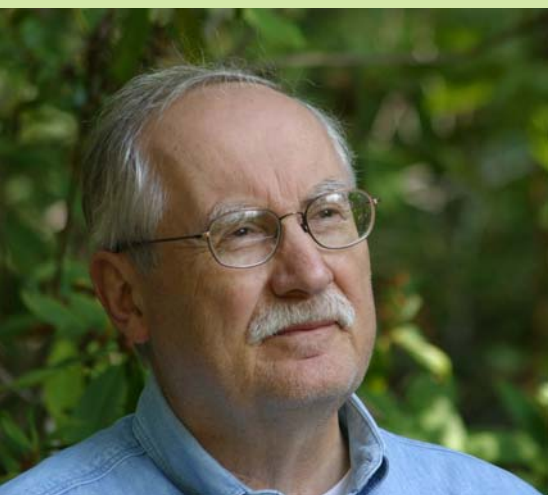
inventory of the region's forest resources in the 1930s has been used more recently to assess extent of old-growth forests and carbon stored in the public forest landscape before



The Andrews family at the H.J. Andrews Experimental Forest in August 2005.

significant harvest. Highlights from his reports from about 70 years ago were republished in 2003 by the Pacific Northwest Research Station (General Technical Report 584).

JERRY FRANKLIN RECEIVES HEINZ AWARD



Jerry Franklin. Photo by Mike Furniss.

The Heinz Foundation recognized Jerry Franklin for his lifetime of work on behalf of forests, especially old-growth

forests, with the 2005 Heinz Medal for work on issues of the environment. Congratulations to Jerry on this nicely deserved award. Recognizing his roots in the Andrews Forest, a generous portion of the monetary award forms the base of a fund in the Oregon State University Foundation to support the long-term vegetation measurements and research program across the Pacific Northwest. Thank you, Jerry.

For more information about the Andrews Forest Fund, please see the column to the right or contact Lisa French at Oregon State University, Lisa.French@oregonstate.edu.

THE ANDREWS FOREST FUND

The Andrews Forest Fund has been developed as a way for individuals and organizations to support the good work at the Forest. While many research projects at the Andrews Forest receive government funding, gifts from individuals and organizations are critical for such initiatives as:

- support for innovative research studies
- opportunities for undergraduate and graduate students
- community outreach and education
- 'adopt-a-plot' for monitoring change in old-growth forests
- support a visiting scholar in the sciences or humanities
- other suitable initiatives of your choice

Your gift to support the Andrews Forest is an investment in the long-term viability of our forests and streams.

For more information on making a gift, please contact:

Lisa French,
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Oregon State University
College of Forestry
541-737-2900
Lisa.French@oregonstate.edu

HJA DAY 2006

The annual field day at the Andrews forest, HJA Day, was held this year on June 20. Participants came from a variety of organizations and agencies and institutions including Oregon State University, the Pacific Northwest Research Station, the Willamette National Forest, University of Washington, Portland State University, EPA, BLM, and USGS. This year's theme was "New Directions and Opportunities in Long Term Studies." Presentations from graduate students and researchers touched on education, management connections, isotopic work in watersheds, digitization of the HJA arthropod collection, biodiversity in wood decay fungi, growth rates of old growth trees, and invasive species. Field trips visited old growth stands, river systems, and young stands.



NEW! THE ANDREWS FOREST NEWSLETTER

The H.J. Andrews Experimental Forest has a deep and rich history. Many, many people have engaged with the place in many different ways. The Forest has been an important part of the lives of a large community of present and former students, scientists, land managers, H.J. Andrews family members, and other members of the extended Andrews Forest family. But we have not kept touch in any organized way. This newsletter is a first step in encouraging communication across the extended family. We expect to send out newsletters once or twice a year – and we hope to hear back from you.

We have lost touch with some folks with Andrews Forest histories. Please let us know of others who might be interested in staying in touch with the Andrews Forest by receiving this newsletter.

If you would like to not receive this newsletter, please let us know that too. If you have a preference for email or paper mail delivery, please let us know and if your preference is paper, please send us your mailing address.

The Andrews Forest Newsletter is published at Oregon State University, in Corvallis, Oregon. Send comments, questions, and suggestions to:

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