FES 5-year Report

October 8, 2019

Troy Hall, Department Head
A brief review...

- FES created in 2008
  - Merger of Forest Resources and Forest Science
- Leadership turnover
  - Brenda McComb (2009 – 2011)
  - Paul Doescher (2011 – 2013)
  - Jim Johnson (2014)
  - Troy Hall (2014 – 2019)
Our department brings together biological and social scientists and philosophers to understand ecological systems, social systems, and the interactions between them. We work in terrestrial to aquatic systems, in wildland to urban settings, and from local to global scales. We evaluate the scientific and philosophical basis for management and policy decisions and provide enhanced frameworks for those decisions reflective of our latest findings. We conduct creative problem-solving and fundamental research; educate and engage the next generation of scholars, practitioners and users of the world’s natural resources; and share our knowledge and discoveries with others.
STAFFING
CoF T/TT faculty over the years

On-Campus T/TT Faculty (w/o Extension)

- FERM
- FES
- WSE

Number of Faculty, all ranks

Year

FES personnel changes since 2014

**T/TT Departed**
- Albers (2014)
- Salwasser (2014)
- Jensen (2014)
- Shelby (2015)
- Doescher (2015)
- Harmon (2016)
- Tynon (2016)
- Johnson (2017)
- Ganio (2018)
- Lachenbruch (2019)
- Upcoming: Law (2019)

**Moved to Admin:**
- Rosenberger & Bliss

**New T/TT**
- Hall (2014)
- Warren (2015)
- Krawchuk (2015)
- Munanura (2015)
- Hajjar (2016)
- D’Antonio (2016)
- Open: Forest Biodiversity Conserv.
- Open: Forest Carbon
Other personnel

- Extension
  - Specialists
  - Agents
  - Professors of Practice
  - Program coordinators
- Professorial, non-tenure-track
  - Visiting assistant professors
  - Senior research
- Instructors
  - Full-time
  - Part-time
  - One-off
- Research-related
  - Professional faculty
  - Post-docs
  - FRAs
Considering FES Staffing Priorities

- What are the right criteria for next hires?
  - Research emphasis
  - Teaching nexus
  - Other?
DEPARTMENTAL POLICIES AND PROCEDURES
Process/policy initiatives since 2014

- Governance policy
- Peer review of teaching
- Mentoring committees
- Promotion & tenure guidelines
- TA policy
DEI leadership

- CoF planning process
- Membership on college committee
- ADVANCE
Process/policy initiatives

- What’s needed next?
  - Review of governance policy
  - Review of standing and ad hoc committees
  - Committee charters and membership
  - DEI-specific P&T criteria
  - P&T criteria for different ranks
  - With a shift toward more junior faculty, what – if anything -- should be done differently?
TEACHING
FES SCH: All Courses, Grad + Undergrad

Annual Student Credit Hour Production, Corvallis/Ecampus FES

- 2014-15
- 2015-16
- 2016-17
- 2017-18
- 2018-19
SCH production in CoF last year

Of 20,524 SCH, FES accounted for 53%
Undergrad Degree Programs

- Tourism, Recreation, and Adventure Leadership
Undergrad Degree Programs

- Natural Resources
  - Steady growth since inception
Undergrad Degree Programs

- Developed new Integrated Conservation Analysis Specialty Option in NR
  - NR 202 Natural Resource Problems & Solutions
  - NR 312 Critical Thinking for Natural Resource Challenges
  - NR 325 Scientific Methods for Analyzing Natural Resource Problems
  - NR 351 When Science Escapes the Lab: Science & Resource Management
Undergrad Degree Programs

Natural Resources
- Rolled out version 3.0
- Revised options
- FES 485 Consensus & Natural Resources now required
- Refined capstone (NR 455)

The Structured Decision Making Framework

https://nctc.fws.gov/courses/programs/decision-analysis/structured-decision-making-overview.html
Number of graduates (BS degrees)

Number of Graduates from FES undergraduate programs, by year

Percent of Degrees
NR + RRM as % of CoF undergrad degrees
Teaching – contributions to undergraduate student success

- Support for other degree programs through courses offered:
  - Forest Biology
  - Entomology
  - Forest Ecology
  - Fire Ecology
  - Genes & Chemicals in Ag
Teaching – contributions to undergraduate student success

- Bacc Core
  - TRAL 357 Parks and Protected Areas Management
  - NR 351 When Science Escapes the Lab
  - FES 486 Public Lands Policy & Management (WIC)
  - FES/NR 477 Agroforestry
Teaching – contributions to undergraduate student success

- Projects
- Internships

Fs.fed.us

Let’s go camping Oregon
Study Abroad

- Costa Rica
- Chile
- Borneo

COSTA RICA: AN IMMERSION IN CULTURE

OIL PALMS AND ORANGUTANS: FOREST CONSERVATION IN MALAYSIAN BORNEO
Graduate Degree Programs
Graduate Degree Programs

- Revised MS/PhD
  - Employer & grad survey
  - Learning outcomes
  - Degree requirements
Degree Programs - MNR & Certificates

- MNR revisions
  - Improved oversight of student progress & student tracking
  - Split capstone into clear sequence
  - Appointed curriculum committee

- Certificates
  - Steady enrollment in Sustainable NR Certificate
  - Launched Forests & Climate Change certificate
  - Growth in Urban Forestry Certificate
Degree Programs - MNR

- Launched the Accelerated Masters (AMP)
Degree Programs – MNR

- Accelerated Masters
  - 8 Interested students so far...
  - All but one are taking part time classes while they work full time jobs; all have GPA 3.5+
Grad programs, across campus and afar

Ecology, Evolution and Conservation Biology Seminar Series

FW/IB/BOT/FES 507
Winter Term
Wednesdays 3-4 P.M.
Withycombe 109

Free and open to the public!

January 9 // Dr. Jane Lubchenco
Oregon State University
Balancing conservation and sustainable use: Science and policy

January 16 // Dr. Lael Parrott
University of British Columbia
Building sustainable future landscapes: Lessons from the Oregon Valley, British Columbia

February 13 // Dr. Albert Ruhi
UC Berkeley
Rivers of the Anthropocene: Responses of freshwater communities to novel flow regimes

February 20 // Dr. Steve Beissinger
UC Berkeley
A century of climate and land use change on birds and mammals: The Grinnell Resurvey Project.
Grad programs, across campus and afar
Teaching – Issues for discussion

- Consider our role in Bacc Core and high-impact undergrad offerings
- Marketing the ICA option in the NR degree
- Consider the need for a market survey/employer survey?
- Prep for the MS, PhD, and MNR 10-year reviews
- Decide whether to offer MNR on campus
RESEARCH
Grant awards (Cayuse), by FY

Dollars

2015 2016 2017 2018 2019

FES
FERM
WSE
RESEARCH: A FEW HIGHLIGHTS
LTER

HJ Andrews Experimental Forest
LONG-TERM ECOLOGICAL RESEARCH
Pollinator recognition by a keystone tropical plant

Matthew G. Betts\textsuperscript{a,1}, Adam S. Hadley\textsuperscript{a}, and W. John Kress\textsuperscript{b}

\textsuperscript{a}Department of Forest Ecosystems and Society, Oregon State University, Corvallis, OR 97331; and \textsuperscript{b}Department of Botany, National Museum of Natural History, Smithsonian Institution, Washington, DC 20013-7012

Edited by James D. Thomson, University of Toronto, Toronto, Canada, and accepted by the Editorial Board February 10, 2015 (received for review October 10, 2014)

Understanding the mechanisms enabling coevolution in complex mutualistic networks remains a central challenge in evolutionary biology. We show for the first time, to our knowledge, that a tropical plant species has the capacity to discriminate among floral traits with particular types of pollinators (e.g., bird-pollinated and bee-pollinated) (14, 15). However, observational pollination mutualisms indicate a high degree of generality within floral syndromes (16, 17); plant species may exhibit...
Adapt to more wildfire in western North American forests as climate changes

Tania Schoennagel¹, Jennifer K. Balch¹, Hannah Brenkert-Smith², Philip E. Dennison³, Brian J. Harvey⁴, Meg A. Krawchuk⁵, Nathan Mietkiewicz¹, Penelope Morgan³, Max A. Moritz⁹, Ray Rasker³, Monica G. Turner⁹, and Cathy Whitlock⁸,¹
OSU receives $4 million grant to identify mechanisms for control of genetic engineering in plants.
Comparison of USDA Forest Service and Stakeholder Motivations and Experiences in Collaborative Federal Forest Governance in the Western United States

Emily Jane Davis¹ · Eric M. White² · Lee K. Cerveny² · David Seesholtz³ · Meagan L. Nuss⁴ · Donald R. Ulrich⁴

Environmental Management (2017) 60:908–921
DOI 10.1007/s00267-017-0913-5

Research frontiers in community forest management
Reem Hajjar¹,² and Johan A Oldekop²,³
Recreation & Ecotourism

Wildland recreation disturbance: broad-scale spatial analysis and management

Kevin J Gutwiler¹, Ashley L D’Antonio³, and Christopher A Monz³

Front Ecol Environ 2017

Ecotourism in Sub-Saharan Africa

Thirty Years of Practice

Edited by
Kenneth F. Bockman and Ian E. Munanura

Parks and Protected Areas in Canada

Planning and Management

Edited by
Philip Dearden · Rick Rollins · Mark Needham
Managing Carbon in the Forest Sector

Mark E. Harmon, John L. Campbell
In November 2017, 15,364 scientists signed a World Scientists' Warning to Humanity: A Second Notice written by lead author professor of ecology, William J. Ripple of Oregon State University, along with 7 co-authors calling for, among other things, limiting population growth, and drastically diminishing per capita consumption of fossil fuels, meat, and other resources. The Second Notice...
Bev Law
Research - Discussion topics

- Which research areas should we be collectively exploring?
- What types of funding can/should we be seeking?
- How can we maintain a robust research-based grad program?
- What recommendations do we want to make to new Dean?
SERVICE
Women Owning Woodlands
Professional leadership & service

- IUFRO working groups
- Conference leadership
- Editorial boards
- Consultants to agencies and international bodies
- Service on NGOs and other boards
WRAPPING UP…
FES points of pride

- FES accounts for a majority of graduates from CoF
- We are the primary grant getter in the college
- We conduct broad, exciting, and interdisciplinary research on critical global topics
- We provide impactful outreach, leadership for college initiatives, and service to our professions
QUESTIONS & DISCUSSION