# HAUB SCHOOL UPDATE

**SPRING 2016** 





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## Honoring Ina Goodman

Haub School student Ina Goodman of Cody passed away unexpectedly of natural causes on April 5. A senior in environment and natural resources and biology, she was much admired by her peers and all members of the Haub School community. We greatly mourn her passing, and are thinking of her in this time of celebration.

The Haub School of Environment and Natural Resources advances the understanding and resolution of complex natural resource challenges through interdisciplinary education, dissemination of information, and collaborative decision-making.

#### **University of Wyoming**

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Cover Photo: Melanie Matthews

# LETTER FROM THE DIRECTOR

Dear friends of the Haub School,

Each spring, we bring together students, instructors, families, and guests to celebrate our graduates' hard work and future opportunities. This year we sent off 20 graduate students, including two PhD students, as well as 43 undergraduate students, more than twice as many as last year. These graduates earned primary majors in 35 fields from all seven UW colleges.

These bright young minds will apply balanced, thoughtful, problem-solving approaches and critical thinking skills to some of the most urgent challenges of our day. They will create a better, more fair, more sustainable, and more creative world. We couldn't be prouder of this essential work, and we greatly value your interest in and support for our programs.

Sincerely,

Indy Burke

Indy Burke

Director, Haub School of Environment and Natural Resources



## RESEARCH HIGHLIGHTS

Faculty members at the Haub School conduct research in a variety of fields to advance the understanding of complex environment and natural resource systems.

#### KEVIN MONTEITH RECEIVES AWARDS

Haub School Assistant Professor Kevin Monteith was named the 2015 "Professional of the Year" by the Wyoming Chapter of the Wildlife Society. He was also co-recipient of the national Wildlife Society's 2015 Wildlife Publication Award for his paper, "Life History Characteristics of Mule Deer: Effects of Nutrition in a Variable Environment." The 62-page monograph details groundbreaking research on mule deer nutrition resulting from a 13-year study of a migratory population in California's Sierra Nevada.

#### RESEARCH INFORMS CONSERVATION PLANNING

Jo Albers, Knobloch Chair in Conservation Finance and Economics, coauthored a recent paper relevant to conservation decision making. She and her coauthors created a model to select the nature reserve configuration that would conserve the most species in a system where wildfire spreads out from a given location, destroying habitat as it burns.

"Almost all of the research on conservation reserve design has rested on the assumption that you want connectivity," Albers says. "But there are reasons you might want protected areas to be more spread out. Invasive species, fire, disease—those are habitat threats with spatial relationships." Ecosystem risks that spread spatially should inform our conservation decisions, she says.

#### COURTNEY CARLSON WINS WRITING RESIDENCY

Haub School Assistant Professor of Environmental Humanities, Courtney Carlson, was recently awarded the Andrews Forest Writing Residency for spring 2016. The award is given to creative writers "whose work reflects a keen awareness of the natural world and an appreciation for both scientific and literary ways of knowing." The work Carlson produces while living in Oregon's H.J. Andrews Experimental Forest will join a collection spanning hundreds of years and will be archived at Oregon State University.



Photo: The Wildlife Society



Photo: Melanie Matthews



Photo: Melanie Matthews



# **ACADEMIC PROGRAMS**

The Haub School brings together UW's most ambitious students and asks them to seek out information, think critically from multiple perspectives, consider the needs of a range of stakeholders, and craft innovative answers to big questions. Our core synthesis courses, focused on problem-based, active learning, are central to this approach. Students with diverse perspectives collaborate in interdisciplinary environments.

#### DOMESTIC ENVIRONMENTAL ASSESSMENT

Interdisciplinary student teams interview stakeholders, visit project sites, and dig into the literature to develop and evaluate a suite of solutions for a current environmental issue. This year, undergraduate students assessed wolf management, wind energy, conservation easements, wild horse management, and an oil and gas project. The graduate-level course delves into NEPA analysis and other regulatory policies. Students interpret and apply policies in an interdisciplinary framework. This year's graduate project involved public and private land, energy generation by private businesses, and federal regulatory processes to assess a proposed wind farm.

#### LAW AND POLICY ENVIRONMENTAL ASSESSMENT

The law and policy core course for undergraduates presents case studies from three different environmental decision-making processes: a NEPA analysis, a federal rulemaking process, and a community planning/zoning issue. The students experience the interdisciplinary nature of natural resource challenges through simulated public meetings and by writing in-depth comment letters and alternative development reports.

#### INTERNATIONAL ENVIRONMENTAL ASSESSMENT

The international core course, available to both undergraduate and graduate students, exposes students to European Union (EU) environmental policy. This course begins with a 10-day trip to the Canary Islands, a confined land area with intense natural resource issues. Local scientists, resource managers, and business owners immerse students in protected area and forest management, agriculture, tourism development, energy generation, water supply, and waste management. After they return, students create a development proposal using EU, Spanish, and Canary Island policies and laws.





Photo: Melanie Matthews

# PATAGONIA TRIP REPORT

After studying Wyoming rangeland management in Indy Burke's fall semester course "Sustaining Temperate Drylands," ten UW students traveled with her and other instructors to the southernmost region in Chile to learn how Patagonians practice sustainable grazing. The students learned about the dominant landmanagement activity, domestic sheep grazing, by working alongside local ranchers to herd sheep, count lambs, and assess range condition—all in sustained 40+ mph winds. Students also visited

a king penguin colony and camped in geodesic domes in Karukina Natural Park in Tierra del Fuego. Upon return, students completed creative projects based on their experiences. Outputs ranged from poetry exploring the difficulties faced by ranchers and natural resource managers on two different continents, to an in-depth analysis of the region's soils, and more. The Haub School intends to offer this course during UW's winter break session in alternating years.

# NEW MINOR IN OUTDOOR LEADERSHIP

This spring the Haub School launched a new minor in Outdoor Leadership in partnership with the UW Outdoor Program. This 18-credit-hour minor can be added to any undergraduate degree program at UW. Students develop skills for leading others in outdoor and wilderness settings. They study in the classroom and the field to gain experiences in leadership, ethics, recreation management, field ecology, and outdoor skills.



# **RUCKLESHAUS INSTITUTE**

#### Collaborative Solutions

# WESTERN GOVERNORS' ASSOCIATION ENDANGERED SPECIES ACT WORKSHOPS

The Western Governors' Association asked the Ruckelshaus Institute to lead stakeholder feedback and discussion sessions for their Species Conservation and Endangered Species Act Initiative. We designed and facilitated robust, bipartisan conversations among stakeholders representing energy, industry, government, conservation, recreation, forestry, fishing, and agriculture. The workshops, which took place in Cody, WY; Boise, ID; Denver, CO; and Honolulu, HI; generated stakeholder-driven recommendations to improve state species conservation activities and suggested pathways for states to partner in Endangered Species Act implementation.



Photo: Kit Freedman

#### WYOMING PUBLIC LANDS INITIATIVE

The 1976 Federal Lands Policy and Management Act required that federal lands be inventoried for areas with "wilderness characteristics" and that the Department of Interior issue a report recommending the identified Wilderness Study Areas either for permanent wilderness designation or for release to multiple use. The BLM issued its Wyoming report in 1991, recommending that 337,140 acres of the state's 577,504 wilderness study acres be released. Congress did not act on that recommendation. Today, Wyoming still has 42 BLM Wilderness Study Areas, plus three on Forest Service land.

In 2015 the Wyoming County Commissioners Association created the Wyoming Public Lands Initiative to develop a stakeholder-led recommendation to Congress on what to do with the state's Wilderness Study Areas. The association is encouraging county commissioners to convene working groups composed of representatives with diverse interests to negotiate for final disposition of these lands. They asked the Ruckelshaus Institute to train county commissioners and interest group representatives in collaborative decision making.

Designation of public lands as either wilderness or multiple use is a complex and potentially contentious undertaking. The Ruckelshaus Institute is working closely with the Wyoming County Commissioners Association to provide training, facilitation assistance, and resources on collaborative decision making. This is a significant opportunity for us to enhance the capacity of people in Wyoming to find shared solutions for future management of public lands.

# **NEW PUBLICATIONS**

RESIDENTIAL DEVELOPMENT EFFECTS ON FIREFIGHT-ING COSTS IN THE WILDLAND-URBAN INTERFACE

The latest publication from the Wyoming Open Spaces Initiative explores how different housing development patterns in the wildland-urban interface influence the cost of fighting fires in



the Rocky Mountain West. Residential Development Effects on Firefighting Costs in the Wildland-Urban Interface suggests ways local governments and planners can reduce wildfire suppression costs by increasing firefighting efficiency through strategic land use planning.

#### WESTERN CONFLUENCE MAGAZINE

Issue 05 of our natural resource science and management magazine, *Western Confluence*, came out in January. Articles explore the West's burgeoning recreation and tourism economy and ways that land managers provide outdoor opportunities amidst their other obligations.

Our next issue, about sustaining working landscapes and conservation on private lands, will be out in June. Make a contribution, comment on any story, sign up for our email newsletter, or subscribe for free at westernconfluence.org.





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