2016 YEAR IN REVIEW

New Haub School Leadership

Alumni Make Strides in ENR Fields

Student Awards

Sustainability at UW and Beyond

Ruckelshaus Institute Initiatives

Collaborative Solutions for Wyoming
WHO WE ARE

STAFF AND FACULTY

Doug Wachob, Interim Dean and Director of Academic Programs
Jo Albers, Knobloch Chair in Conservation Economics and Finance
Maggie Bourque, Academic Programs Coordinator and Lecturer
Courtney Carlson, Assistant Professor, Environmental Humanities
Kit Freedman, Project and Outreach Coordinator
Mandy Gifford, Administrative Associate
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Nicole Korfanta, Ruckelshaus Institute Director
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Kimberly Messersmith, Business Manager
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OUR MISSION

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

Cover image: Haub School student Jesse Irish scans the Wyoming landscape during the Teton Field Week.
LETTER FROM THE DEAN

Dear Friends of the Haub School,

When our long-time director Indy Burke announced this summer that she had accepted the deanship at the Yale School of Forestry and Environmental Studies, we at the Haub School felt both soaring pride and a sense of loss. For eight years Dr. Burke advanced the Haub School’s mission, expanding our enrollment and academic programs, promoting our outreach initiatives and collaborative solutions work, hiring essential new faculty members, and fundraising tirelessly.

As interim dean, I aim to continue the upward momentum Dr. Burke created here. I’ve begun by enhancing relationships with our campus partners, advisory board members, donors, and collaborators around the state. From my dozens of in-depth discussions with these constituents, I am confident that the Haub School has a strong future.

In the midst of significant changes at UW, there are real opportunities to advance the Haub School. I’ve found great enthusiasm and support for our innovative, interdisciplinary approaches to education and collaborative problem solving around natural resource challenges.

I am honored to work with our Haub School team as UW conducts the search for our new dean, and I look forward to returning to my role as Academic Programs Director once the position is filled. In the meantime, from all of us at the Haub School, thank you for your support and involvement.

Sincerely,

Doug Wachob, Interim Dean

DIRECTOR CHANGES TO DEAN

In summer of 2016, the Board of Trustees renamed the top position in the Haub School from director to dean. The title of dean highlights our emphasis on academic programs, recognizes our scholarly contributions to the UW community, and affirms the Haub School’s partnerships and collaborations with UW’s eight colleges.
Leadership and Vision

This summer Indy Burke, our director since 2008, accepted a prestigious new position as Dean of the Yale School of Forestry and Environmental Studies, which she began on October 1. A press release from Yale summarized her years at UW by stating, “The Haub School is among the top institutions in the western United States for research, teaching, and outreach in natural resources, and during Burke’s eight-year tenure, it has developed an international reputation. Under her direction, the school has grown dramatically in enrollment, joint degree programs, philanthropic donations, and engagement in state- and region-wide land management and policy.” We at the Haub School greatly value Burke’s leadership and vision, and wish her the best in her new role at Yale.

![Graph showing enrollment trends in Haub School academic programs from 2008-09 to 2016-17.]

**Legend:**
- BS in Environmental Systems Science
- Undergraduate Minor in Outdoor Leadership
- Undergraduate Minor in Sustainability
- JD/MA in Law and ENR
- Graduate Minor in ENR
- Graduate Major in ENR
- Undergraduate Minor in ENR
- Undergraduate Major in ENR
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Larry Wolfe, Attorney, UW Foundation Board Member

SEARCH FOR A NEW HAUB SCHOOL DEAN

We seek an accomplished and creative leader to set a programmatic vision for the Haub School and to grow our endowments and initiatives. The new dean will foster strategic growth while sustaining and building relationships with our campus partners, our distinguished advisory board, and a diverse set of off-campus stakeholders. Our new leader must enthusiastically support the pioneering environmental and natural resource teaching, research, and outreach we do. A search committee chaired by UW Provost Kate Miller is now accepting applications, review of which will begin on January 6.
In September 2016 we launched a new bachelor of science in Environmental Systems Science (ESS), the first undergraduate degree hosted by the Haub School. Last year, a faculty advisory committee refined the program curriculum and recommended moving what was then Earth Systems Science into the Haub School. This was a natural fit due to the interdisciplinary nature of the program and our partnerships with several departments offering courses relevant to the degree. The deans council also recommended renaming the program to Environmental Systems Science.

The BS in ESS introduces students to the physical, biological, and human components of the Earth system through data collection, statistical analysis, information technology, and modeling. The degree requires foundational courses in system science, biological science, earth science, and physical science; courses exploring the anthrosphere, atmosphere, biosphere, and lithosphere; skills and tools courses; and a minor as an area of focus. Students develop interdisciplinary and integrative thinking, design and carry out scientific investigations, apply systems concepts to environmental problems, and use technological tools to examine spatial and temporal patterns. As of fall 2016, 20 students are already enrolled in the new program.
Student Awards

2016 Haub School Outstanding Graduate
Barbara Jean “BJ” Bender BS in ENR and Rangeland Ecology and Watershed Management, minor in Spanish, Honors

2016-17 Plummer Scholars
Meghann Cranford BS in ENR and Energy Resource Management, minors in Sustainability and Business
Madeline Onstott BS in ENR and Geology and Earth Sciences, minor in Sustainability
Anthony Mort BS in Wildlife and Fisheries Biology and Management
Jackie Carbert BA in ENR and Geography, concentrations in Natural Resource Management and Geographic Information Systems (GIS), minor in Journalism
Amy Jacobs MS in ENR and Soil Science
John P. Ellbogen Outstanding Graduate Teaching Award
Chris Beltz PhD in Ecology, minor in ENR
Udall Scholarship, Honorable Mention
Alanna Elder BS in ENR and Agroecology, minor in Sustainability
Centennial Fellowship in Global Studies
Jeremy Goldsmith MA in ENR and Global and Area Studies

NSF Internship at Smithsonian Museum of Natural History and Distinguished Student Speaker, Keith and Thyra Thompson Honors Convocation
Dalyn Grindle BA in ENR and Anthropology/Archaeology

Center for Global Studies International Internship/Fieldwork Grant
Thao Nguyen MA in ENR and Political Science

Center for Global Studies/School of Energy Resources Nielson Research Excellence Award
Katie Guffey PhD in Science Education, minor in ENR
Finalist, Rosemarie Spitaleri Outstanding Graduating Female Award
Sierra Jech BS in ESS and Chemistry, minor in Gender and Women’s Studies

2016 Wyoming Wildlife Society Fellowship
Jace Cussing BS in ENR and Fisheries Biology and Management

2016 Women’s National Nordic Ski Champion
Elise Sulser BS in ENR and Microbiology
RESEARCH AND CREATIVE ACTIVITY

Highlights

Deer-Elk Ecology Research (DEER) Project
Kevin Monteith, assistant professor in the Haub School, and PhD student Matt Hayes are leading a research project to learn what factors regulate struggling mule deer populations and determine if competition with elk is playing a role. Working in the Flaming Gorge area south of Rock Springs, the scientists are using GPS collar data, fawn survival, spring and fall body fat assessments, fecal analysis, and habitat information to determine if and how deer and elk compete for resources. They will also investigate how coyote and mountain lion predation influences deer populations.

Incentives to Change Forest Use Behavior
Recognizing her work analyzing the effectiveness of economic incentives for protecting forests in low-income countries, Jo Albers, Knobloch Chair in Conservation Economics and Finance at the Haub School, contributed an invited entry to the Encyclopedia of the Anthropocene, a major reference work to be published in print and online in 2017. The entry was on incentives for forest conservation to mitigate climate change through REDD, a United Nations strategy to Reduce Emissions from Deforestation and forest Degradation. Albers’ article describes REDD’s history and financing, discusses its implementation, explores its underappreciated costs, and describes its current status and future directions.

The Gaze and the Lens
Courtney Carlson, assistant professor in the Haub School, presented “The Gaze and the Lens: Power Asymmetries and Gender in Nature and Adventure Photography” at the Association of Environmental Studies and Sciences conference in Washington, DC. She conducted a rhetorical analysis of Instagram pictures taken of and by women nature and outdoor adventure photographers, asking what the visual tropes in these images—think photographer in a mountain setting, back to camera, long hair billowing—suggest about women, the female form, and nature.
When Art and Science Meet

Maggie Bourque, lecturer and academic programs coordinator in the Haub School, co-organized “Re-envisioning the Laboratory: Sci-Art Symposium” with colleagues from the UW Art Museum, Department of Art and Art History, Science and Math Teaching Center, Creative Writing Program, and Biodiversity Institute. This two-day collaborative forum engaged over 100 participants in innovative thinking across community, disciplinary, and topical boundaries. Bourque also co-presented a session at the conference titled “Art, Science, and Community Engagement: A New Collaborative Model for Wyoming,” which described an ongoing collaboration with internationally-recognized public artists, Laramie community members, academics, planners, and local artists.

Economic Impact to Wyoming from Sage Grouse Conservation

Temple Stoellinger, assistant professor in the Haub School, and Tex Taylor, professor in the Department of Agricultural and Applied Economics, analyzed the economic impact to Wyoming from sage grouse conservation. They assessed 1) the baseline contributions to Wyoming’s economy from activities on sage grouse habitat including energy development and livestock grazing; 2) the amount by which those contributions would be reduced under the Wyoming Core Area Strategy; and 3) the reductions were the sage grouse to be listed as an endangered species. While the Wyoming Core Area Strategy does reduce the economic output from sage grouse habitat, those reductions are much less than would result from an endangered species listing.

Haub School Faculty Member Wins National Wildlife Publication Awards

Congratulations to Kevin Monteith and co-authors, who won the 2016 Wildlife Publication Award for Outstanding Monograph from the Wildlife Society for the publication “Effects of Harvest, Culture, and Climate on Trends in Size of Horn-like Structures in Trophy Ungulates.” He accepted the award at the society’s annual conference in Raleigh, North Carolina, in October. Monteith also received this award in 2015 for the publication “Life History Characteristics of Mule Deer: Effects of Nutrition in a Variable Environment.”
Haub School faculty members authored several papers and book chapters in 2016, contributing essential new thought and understanding to inform solutions to natural resource challenges around the West and the world.


Reducing Waste, Saving Energy

As president of the Sustainability Club and student chair for the Sustainability Coalition, Haub School student Meghann Cranford is among the leaders promoting “Zero-Waste” events at UW. At the April 2016 Shepard Symposium, a large annual conference held at UW, her efforts helped divert over 400 pounds of waste away from the landfill toward composting and recycling.

Sustainability students Ada Harris and Alana Elder, both active leaders for ACRES, the UW student-run farm, promote sustainability in the Laramie community by selling vegetables from the farm at the downtown farmers’ market, collecting compost from businesses and community members around town, sponsoring paid summer student farm internships, hosting agricultural research projects, and more.

The Campus Sustainability Committee, co-chaired by Ruckelshaus Institute director, Nicole Korfanta, creates programs to reduce resource use and waste, improve campus operations, and save money on UW utility bills. This year the committee published EcoPokes, a newsletter encouraging energy-saving behaviors on campus. The Ruckelshaus Institute also supports green building efforts through the US Green Building Council’s Wyoming chapter. This October, the group hosted its biennial conference in Jackson, Wyoming. Mark Turner, Wyoming native and sustainable building expert, gave a keynote speech on “The Revolution of Simplicity,” which considers community enrichment, historical traditions, and right-scaled buildings as key for a more sustainable future.
Initiatives

Wyoming Open Spaces Initiative

Local Government Land-Use Planning in Wyoming, by Jeff Hamerlinck and William Gribb, is the latest publication from the Wyoming Open Spaces Initiative. The 12-page document provides an overview of the origins, purpose, process, and benefits of local-government land-use planning to empower Wyoming citizens to participate in their local communities.

Western Water Initiative

In 2014 we issued a competitive grant program for UW researchers through our Western Water Initiative. Three of those projects wrapped up this year. Professor Scott Miller and master’s student Bea Gordon used hydrogeophysics and other tools to quantify return flow to streams from flood irrigation in the Upper Wind River Basin. Gary Beauvais and George Jones, both at the Wyoming Natural Diversity Database, assessed the ecosystem services provided by beaver-modified streams in the Rocky Mountains. And Associate Professor Kristi Hansen and master’s student Spencer Blevins quantified the nonagricultural benefits of flood irrigation by analyzing how late season return flows affect the brown trout fishery in Wyoming’s Green River. Thank you to Christy Walton and the Walton Family Foundation for generously supporting this initiative.

WESTERN CONFLUENCE MAGAZINE

Our latest issue covers efforts to sustain private working landscapes and the open spaces they host. Stories explore proposed reforms to conservation easements, how conservationists must think like real estate developers to protect wildlife habitat, the true benefits of flood irrigation, and many other topics. Thanks to Christy Walton and the Walton Family Foundation, Gilman and Margaret Ordway and the G.O. Forward Fund, and Dick and Mary Lou Taggart for sponsoring the private lands issue of Western Confluence and allowing us to share these stories free of charge with interested readers.
Projects

National Parks Assessments

In partnership with the Wyoming Natural Diversity Database, the Ruckelshaus Institute is wrapping up a two-year effort to complete Natural Resource Condition Assessments for four National Park Service units: Fort Laramie National Historic Site, Scotts Bluff National Monument, Agate Fossil Beds National Monument, and Badlands National Park. The assessments use existing data to evaluate the condition of resources ranging from pollinator communities to water quality.

Private Lands Management Fellow

Thanks to a generous donation from Haub School board member Whitney MacMillan, the Haub School will soon be hiring a Private Lands Management Senior Fellow. The fellow will support private landowners with tools for sustaining working landscapes, such as sound financial management and intergenerational transfer, emerging markets such as conservation banks, and collaboration with federal, state, and private land managers.
Collaborative Solutions

Thunder Basin Collaborative Learning Workshops
This spring, the Ruckelshaus Institute worked with the Forest Service to hold three collaborative learning workshops about the Thunder Basin National Grassland. The workshops established communication, improved understanding, and enabled collaboration among stakeholders.

Converse County Longitudinal Assessment
The Ruckelshaus Institute partnered with the UW Agricultural and Applied Economics Department, Bureau of Land Management, and Converse County Commissioners to facilitate workshops regarding the socioeconomic impacts of oil and gas development. We also assessed how Converse County residents perceive oil and gas development costs, benefits, and influence on quality of life.

Western Governors Association Endangered Species Workshops
The Ruckelshaus Institute designed and facilitated robust, bipartisan conversations for the Western Governors’ Association’s Species Conservation and Endangered Species Act Initiative. The purpose is to generate stakeholder-driven recommendations for improvements to state species conservation activities and the ESA. Additional solution-oriented workshops are planned for 2017.

Forest Collaboratives
A recommendation that came out of Wyoming Governor Matt Mead’s Task Force on Forests was to support local groups that would make forest management recommendations. The Ruckelshaus Institute is assisting Wyoming Forest Collaborative Assistance Program groups in Sublette and Lincoln Counties as they build collaborative processes to improve forest management.

Pole Mountain Trails Charrette
This summer, the Ruckelshaus Institute worked with Wyoming Pathways and other recreation groups to solicit public input on non-motorized trails in the Pole Mountain area of the Medicine Bow National Forest. The groups hosted a planning session to gather ideas for improving the trail system. Recommendations will inform future public discussion and action.
**Wyoming Public Lands Initiative**

In 2015, the Wyoming County Commissioners Association organized the Wyoming Public Lands Initiative, a voluntary, county-level collaborative process for stakeholders to recommend wilderness designation, release, or other management for Wyoming’s forty-five Wilderness Study Areas. The Ruckelshaus Institute is providing collaborative support, facilitation assistance, resource materials, and training to working groups in Sublette and Teton Counties.

**Regional Sage Grouse Mitigation Strategy**

The Ruckelshaus Institute and Texas A&M University are helping the Bureau of Land Management develop a regional mitigation strategy for the greater sage grouse. The strategy will outline opportunities for compensatory mitigation and ways to coordinate sage grouse management across jurisdictions. The Ruckelshaus Institute will provide collaborative process support to solicit public feedback on the draft plan.

**Collaboration Program**

Our Collaboration Program in Natural Resources (CPNR), a year-long training series to build collaborative capacity among natural resource professionals, is in its fourth year. With 17 participants, this is the largest cohort the program has seen. Participants come from fields as diverse as wildlife, forestry, energy consulting, and sustainability planning and from as far away as Portland, OR, and New York, NY. After five sessions of intensive, hands-on exercises and discussions to develop skills in negotiation, facilitation, and leadership, the participants undertake a practicum project in which they develop a collaborative process for a natural resource issue in their profession or community. CPNR will accept applications for the 2017-18 cohort this winter. Thanks to the Spicer family and Rocky Mountain Power for their sponsorship.
ALUMNI SPOTLIGHTS

Bailey K. Schreiber

Associate, Holland and Hart
JD/MA, Law and ENR, ’15

Last July, Bailey K. Schreiber found herself before a room full of attorneys and legal scholars in Squaw Valley, California, speaking authoritatively on the legal underpinnings for and barriers to landscape-scale compensatory mitigation on federal lands. She had researched the topic for the thesis paper required of students pursuing the joint JD/MA in law and ENR at UW. In the months following her graduation, she worked with attorney Mike Brennan to refine the paper, which was accepted for publication and presentation to the 62nd Annual Rocky Mountain Mineral Law Institute. The talk was just one example of how Schreiber has drawn on her experiences at the Haub School in her career. As an associate at Holland and Hart’s Jackson, Wyoming, office, she comments on Environmental Impact Statements, litigates under the Clean Water Act, and helps clients address historic contamination of properties, among other environmental projects. Reflecting on her first year as a practicing attorney, she adds, “I love it. If someone asked me back when I started law school what I would want to be thinking about on a daily basis, it’s this.”
Benjamin Wise

Brucellosis Feedground Habitat Biologist, WGFD
MS, Veterinary Sciences and ENR, ’11

As the Brucellosis Feedground Habitat Biologist for the Wyoming Game and Fish Department, Benjamin Wise deals with some of the most contentious wildlife issues in the state. While Wyoming’s elk feedgrounds reduce winter mortality and prevent elk from transmitting disease to livestock, they also disrupt wildlife’s natural behavior and elevate infection level in wild herds by crowding animals together. To navigate the politically and socially sensitive feedgrounds issue, Wise has to both be a good scientist and engage with a diverse array of stakeholders whose perspectives and interests do not always align. His masters in veterinary sciences from UW prepared him to conduct field research and publish papers. He credits his dual degree in environment and natural resources with helping him achieve progress on policy and public relations. He says many natural resource professionals, “are good at science and analytics. We are not so good at the human and political perspective. The ENR degree helped me understand diverse ideologies and thinking. If you can understand why people think the way they think, it makes it easier to work through the system and get things done.”
FINANCIAL STATEMENT

Income and Expenditures
Fiscal year July 1, 2015–June 30, 2016

TOTAL INCOME: $2,790,114.08

TOTAL EXPENDITURES: $2,721,729.39
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Thank You for Your Support

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Yes, I’ll contribute to educating future natural resource leaders and supporting sound, inclusive, lasting solutions for natural resource challenges.

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☐ $100  ☐ $250  ☐ $500  ☐ $1,000  ☐ Other $ __________________

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