Dear alumni, this newsletter is not nearly as bleak as last year’s because two great things have happened. The first is that we were finally given permission to replace our operations professor, Han-Sup Han, who had moved to Northern Arizona University two years ago. Given the on-going financial problems at HSU, we despaired of being able to hire a forest engineer. But thanks to the many letters written by the forest sector (alumni, industry and agencies), stressing the importance of this department to the state given the declines in enrollment in the forestry departments at SLO and Berkeley, we were given permission to search for a new faculty member. And we found a jewel, Hunter Harrill, who is profiled later in this newsletter. For all of you who wrote to the president and provost of Humboldt State on our behalf, thank you. It made a difference.

The second piece of great news is that HSU now owns the 900 acre Jacoby Creek property close to campus. Thanks to the persuasiveness and hard work of HSU alum Mark Andre (City of Arcata) and generous support from the California Wildlife Conservation Board and Sierra Pacific Industries. Management of this acquisition will be centered in the Department of Forestry and Wildland Resources. In particular, a Registered Professional Forester from the Department, Dr. Kevin Boston, will begin this summer creating a management group consisting of representatives from a few interested departments as well as stake-holders such as the Wiyot, Humboldt Redwood Company, and City of Arcata. Dr. Boston has been named the first manager of the property, and sees it as a testing ground for the state’s forest practice rules as well as a place for field trips and capstone projects. The property will also be used widely by HSU researchers. Finally, in combination with Wiyot basket makers, the site will be the first in North America to emphasize research on the ecology and exploitation of non-timber forest products. (It is true that we already have the Schatz Tree Farm but it is 45 minutes one-way from campus. Given that labs occur in three hour blocks, it made no sense to take students there. But Jacoby Creek is much closer and we expect it will be heavily used by not just our department but also Wildlife, Fisheries, and Environmental Science and Management. Further, revenue from logging will be used to augment the field trip budgets of CNRS departments.)

Meanwhile, HSU has finally begun to get its finances in order; the budget is more or less balanced. The problem now is that revenue keeps declining because enrollment (and therefore revenue via tuition) keeps going down, and thus a balanced budget continually recedes toward the horizon. Student numbers have been declining for five straight years, and nationally this seems to be an emerging problem for rural universities. Our department is fine. We are one of the few that keep growing; indeed, our intake of freshmen and transfers the year before was the largest since the late 1990s. Nonetheless, the campus-wide revenue declines do impact us; for example, money for buses for field trips comes from student fees.

We said goodbye last year to our long-time lecturer Stephen Madrone when he was elected Humboldt County commissioner. Stephen’s long experience with watershed issues has captivated our students for a decade and will benefit the county in his new role.
This year the Forestry Club insisted on running the annual Logger Ball immediately after the Awards banquet, because, as they put it: “every year after the banquet we are just getting ready to party but it is over at 8!” They rented the Veterans Hall in Arcata and ran both events themselves (including the supper), and dealt with the liquor license and every other regulatory hassle. I sometimes feared this would end up as a disaster, but it was a complete success. The Logger Ball featured two live bands: a forestry student band, Scribner & the Long Logs, and the ever-rocking Barn Fire, out of Blue Lake. Everyone had a great time. And thanks to the raffle, apparel sales, and fundraising, the Forestry Club netted what their President, Conrad Stielau, estimated as a profit equivalent to about one and half logging truck loads of redwood.

By the way, at the Banquet we were able to hand out over $70,000 in scholarships to our students. Almost all of that came from alumni donations. On behalf of the students, I thank you for your generosity.

Some of the winners at the Banquet

This year our Dr. Erin Kelly (with Greg Brown from SLO) published a useful paper on Forestry education in California, using surveys to compare attitudes towards skill sets of both students and employers. Their main conclusion was that the skills employers felt were most lacking in recent graduates were a deep understanding of regulations and how to write a forest plan, as well as knowledge about bio-energy. Here is the graph that captures the conclusions as well as gives you a sense of what employers’ value:
Awards

Dr. Lucy Kerhoulas, who teaches dendrology and physiology for us, was selected the McCrone Promising Faculty Scholar Award, given to the best researcher among the younger faculty members at HSU. Her record for acquiring grants and turning them into publications is excellent, and the recognition is deserved. Note that our department is on a roll: our faculty have won the award three times in the last five years. Meanwhile, Lucy’s student, Gabriel Goff, won second place in the California State University Student Research Competition for his work on conifer encroachment of northern California oak woodlands.

Speaking of awards, Dr. Susan Edinger Marshall (soils, range) was named Range Manager of the Year (2018) by the California-Pacific section of the Society for Range Management, for her tireless efforts on behalf of range management. In addition, she received this year the Distinguished Faculty Award from HSU.

Finally, Dr. Kevin Boston was voted Professor of the Year by our students at the Awards Banquet last April. This is the second straight year he has won. His popularity is not surprising; he is that rare professor whose door is literally always open and students feel free to drop in unannounced with questions.
Focus on a student: Sophia Ackerman-Mero

Sophia is a senior majoring in Forestry with a concentration in Wildland Fire Management and a minor in Geospatial Studies. “I chose to study forestry because I never wanted to be stuck in an office. I wanted the outdoors to be my office,” she says. Sophia is active in Logging Sports and the Fire Ecology Club, and also this year worked part time in the department’s main office. After growing up in Redding, she decided to attend HSU. “A career in Forestry is a career as a land steward.” She feels proud of her decision to become a forester. Her short term aspirations include “finishing up my final semester at HSU and continuing to work seasonally as a wildland firefighter with the USFS until I can secure a full time position.” Longer term, she expects to work her way up the ladder to become a Fire Management Officer with the USFS.
Cal-Pac Society for Range Management and HSU 50th Anniversary celebration

Nearly 90 HSU range alumni and Cal-Pac members joined together on October 12, 2018 for a technical program on the use of fire on rangelands and to hear from notable HSU alumni. The meeting was followed by a banquet at the Plaza Grill. Alumni speakers included: Kenneth Fulgham (HSU Emeritus Professor), Jim Redd (Four Star Realty), Hugh Barrett (retired/consultant), Dustin Detweiler (NRCS), Jennifer Wheeler (BLM), Dawn Coultrap (USFS), and Susan Edinger Marshall (HSU Professor). Our special speaker was Bill Lauenroth (Yale) from the first HSU graduating class of range management majors. While HSU Alum Mitch Perdue attended the celebration (in the plaid shirt below to the left of the “We are Rangelands” sign), we were saddened to learn that he passed away in his sleep on a family vacation on Mexico on November 20. On Saturday, October 13, Lenya Quinn-Davidson and Jeff Stackhouse led a field trip in the Bear River area to discuss the revival of rangeland prescribed burning and landowner burn associations.

Many thanks are due to current HSU students who helped welcome and register guests and who ran the silent and live auction.

Range plant ID contest
For the second consecutive year, HSU placed first in the nation and third in North America in the annual Plant ID Contest held at the Society for Range Management’s convention at Minneapolis in February 2019.

Team members were Rangeland Resource Science majors Eric Garcia, Thomas Mendoza, Sierra Berry, Tess Palmer, and Louise Martin, Environmental Science & Management student Cecily Sanchez, alum Alyssa Boyd (‘18, Rangeland Resource Science) and Corina Godoy (‘18, Environmental Science & Management).

They were among 156 students representing 24 North American universities, which included programs from large agricultural schools like Texas A&M. The colleges to beat, however, were two universities that have dominated the competition for the last few years: Universidad Autónoma Agraria Antonio Narro in Mexico and The University of Alberta in Canada.

“We had a fantastic group that was dedicated and studied hard for this competition,” says team coach Todd Golder, a graduate of our Rangeland Resource Science program in 2000 and former team member, and now an HSU instructor.

The contest required knowledge and quick thinking as students faced the task of identifying 100 plants, mostly grasses, with only 50 seconds to figure out (and spell correctly!) the family/tribe, genus, species, origins, and longevity of each plant.

Golder says the first 50 plants were easily identifiable. From there, things got tough. “The next 25 plants had something unique about them, and the remaining 25 were oddballs, impacted by factors such as overgrazing or brush management or fire. These last ones determine where you’re going to rank.”

He says about 45 percent of the students who competed were able to identify at least 60 plants. “It gives you an idea of the level of knowledge you need to have to win this.”

The highest scoring HSU team member was Eric Garcia, a Rangeland Resource Science major who ranked eighth overall. To prepare for the Plant ID Contest, students like Garcia take Rangeland Resource Science 475 (Advanced Study of Range Plants), which is offered every semester and taught by Golder. The class covers plants that range from California coastal areas to the East Coast to Canada and Mexico.

Focus on a graduate: Brett Watson (Class of 2010)

While of course the great majority of our graduates have gone on to careers in natural resource management, the broad array of skills imparted by a forestry or range degree permits some unusual career paths.

Brett first moved to Humboldt County in 2006 to attend HSU. He immediately fell in love with the area, having no intention of leaving after his BS (2010) in Forestry. He was President and National Co-Chair of HSU’s Student Association for Fire Ecology, as well as President of the Society of American Foresters (HSU Chapter). He then found himself gravitating towards local politics as he pursued issues he cared about deeply, serving on the City of Arcata’s Economic development...
Committee for five years. Impressing everyone with his intelligence and drive, he was appointed to City Council in 2017, was then elected to a five-year term the next year, became Vice-Mayor in 2018, and, finally, Mayor of Arcata in 2019.

At the forefront of his political beliefs is the concept of sustainability. “It’s important,” for Arcata, he says, “to balance embracing HSU, environmental tourism, and other sectors of the economy, while keeping sustainability at the forefront of Arcata’s economic goals.”

Brett Watson, Mayor of Arcata

Our new Operations professor: Hunter Harrill (class of 2006)

The Department of Forestry and Wildland Resources looks forward to the arrival of our newest tenure-line faculty member, Dr. Hunter Harrill. He teaches forest operations, with research interests focused on evaluating innovative steep slope harvesting technology such as cable logging systems, the emerging world-wide practice of winch-assisted (i.e. tethered) felling, biomass harvesting and minimizing environmental impacts from forest operations.

Dr. Harrill grew up in Monterey, California, and then studied forestry at HSU, earning both a BS (2006) and a Masters degree here. Combining a yen to see the world with the more practical desire to further his career, he went to New Zealand for his PhD. Having impressed the forestry sector there with his intelligence and charm, he quickly became a faculty member at the University of Canterbury’s
School of Forestry in Christchurch, with forest engineering as his specialty. For the last few years, he taught forest operations, but his primary role was in research and outreach, rather than teaching, especially the New Zealand Forest Growers Research (FGR), as well as outreach and extension services to loggers and forest managers in New Zealand and abroad. Nonetheless, motivated partly by the desire to return home, but also by the wish to have more engagement with undergraduate students, he applied for, and won, the position made available by the departure of his former thesis adviser, Han-Sup Han.

Hunter says, "It's a real privilege to be able to return to where it all began for me; this is the place where I studied forestry, started my career in the local industry, played rugby and met my wife. It feels great to be home and I'm very excited to engage with the next generation of HSU foresters and help California forest managers address their challenges with responsible forest operations."
HSU Collegiate Soil Judgers Place #1 in 11 western states (overall 19th out of 26).

Humboldt State's Wildland Soils option (under the Rangeland Resource Science major) qualifies graduates as federally qualified Soil Scientists, and we thought it was high time the students tested their mettle. HSU's first National Collegiate Soil Contest team traveled to San Luis Obispo April 13-19 for four days of practice pits, followed by two days of individual and team competition among 26 universities. HSU team members included Nic Anderson (RRS), Daniel Guzman (ESM), Tiffany Perez (RRS), Miles Ritch (RRS), Monica Piña (RRS), and Alex Urban (ESM). They were co-coached by Joe Seney and Susan Edinger Marshall. Judging consisted of morphology, soil profile characteristics, site characteristics, soil classification, and land use interpretations. While host team Cal Poly San Luis Obispo did not compete, HSU outperformed land grant universities such as Utah State, Colorado State, and University of Wyoming.

HSU will host the Region 6 Collegiate Soil Contest November 2-3, with a tour of Joe Seney’s mapping in Redwood State and National Parks and judging on adjacent Green Diamond property (to be confirmed). The HSU team is likely to qualify for the national contest at Ohio State University in 2020 and needs financial support to attend. Please consider sending a gift of support to "HSU Foundation" and include Range & Soils Trust A6725 on the memo line. It should go to Gift Processing SBS 285, 1 Harpst Street, Humboldt State University, Arcata CA 95521. Thanks!
Publications by faculty


Boston, K. 2019. Forest Road - environmental access to the resources in Forest Operations Engineering, State of the Art. Book chapter


McNamara, B., J.M. Kane, D.F. Greene. Accepted. Fuel succession in a rare California closed cone conifer. Fire Ecology


Presentations


Greene, D.F. and McCavour, M.J. 2019. Policy and ecological consequences of the recent shift in the fire regime of California. UNAM (Morelia); Morelia, Mexico.


Hwang, Kyungrok, Han-Sup Han, Susan E. Marshall, Deborah S. Page-Dumroese. 2018. “Amount and location of damage to residual trees from cut-to-length thinning operations in a young redwood forest in northern California.” Forests 9(6):352.


Sillett, S.C. Limits to tree and forest productivity of the five tallest species, 1-hour lecture to the public at Quarryhill Botanical Gardens, Glen Ellen, CA, 28 July 2018.

Sillett, S.C. Performance characteristics of the four tallest conifer species, 1-hour lecture to arborists and tree scientists in Bavaria, Germany, 5 September 2018.

Sillett, S.C. Redwoods and Climate Change Initiative (2009 to present), 1-hour lecture to residents of Santa Lucia Preserve, CA, 21 March 2019.


Zald, HSJ. Integrating multi-temporal Landsat imagery and tree-rings to map climate driven changes in forest productivity in Northern California. CSU ARI PI meeting, Sacramento, CA, September 13, 2018.

New Grants


Greene, D.F. ARI. Baker cypress population dynamics. $14,000.


Kelly, E. Project: Founders Grove public use survey. Funder: Save the Redwoods League. Amount: $9,000

Kelly, E. Project: Grove of Titans public use survey. Funder: Save the Redwoods League. Amount: $35,000

Kelly, E. Project: Redwoods Rising (with Lucy Kerhoulas). Funder: Save the Redwoods League. Amount: $174,000

Kerhoulas, LP. 2019. McCrone Promising Faculty Scholar Award. Humboldt State University ($1,500).


Sillett, S.C. Kenneth L. Fisher Chair in Redwood Forest Ecology, 2018 grant: $154,316

Stubblefield, A. USDA NIFA $162,000 Outdoor Leadership in Forest Management.


Zald, HSJ. CAL FIRE Forest Health Grant Program. The carbon consequences of catchment-scale prescribed burning. $396,089.

Zald, HSJ. CSU ARI, Assessment of low cost multi-angle UAV photogrammetry for forest inventory. $39,215.

Zald, HSJ. USGS Cooperative Agreement, Whitebark pine persistence in the Sierra Nevada. $19,435