

# Humboldt

The Magazine of Humboldt University | Spring 2015



## Surveying the Sea

.....  
Ambitious Study Examines  
Marine Safe Havens Along  
the North Coast

Up Close & Personal  
with the Bats of  
Humboldt County

Photo Essay:  
12 Hours at HSU

**PLUS!** Class Notes,  
Upcoming Campus Events,  
and More

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**ON THE COVER:** Surveying the rocky intertidal zone along California's coast.

**THESE PAGES:** A sea star nestles on a beach surveyed by Humboldt State faculty and student researchers as part of a baseline assessment of California's Marine Protected Areas.

# from the President

AT THE END of the first week of Spring semester, I was contacted by Courtney Haraldson, who at the time was managing Humboldt State’s Facebook page. She informed me that the page had “blown up” with comments and sharing, and I had to take a look.

She was right. Surprisingly, all the action wasn’t related to another gorgeous outdoor photo that alumni so enjoy on our social media. The excitement was about the HSU community sharing stories of the inspiring and lasting connections they had made at the University. It had started with a simple HSU post asking about “one special relationship, experience or adventure.”

Alumni commented about friendships that started on campus. They remarked on marriages related to HSU, sometimes with specifics like the actual classroom where they first met. Current students as well as alumni mentioned specific professors who mentored them, occasionally followed by happy comments from the professors. Parents commented about their pride in their students and how much they enjoyed visiting the area. Here are a few samples:

“So many great people and memories” ... “Having the best teachers in the teaching credential program. They set the bar for what I expect from any educator” ... “We also have continued friendships made at Humboldt since both of us arrived. Our HSU buddies (there are like 17 of us who stay in touch) are friends who are more like family” ... “Life-long friends, and a life-long aversion to mildew” ... “Met my best friend in Humboldt and influenced my sister to go” ... “Best faculty in California.”

The moments were—and are—amazing! I quickly realized that, at the same time everyone was talking about specific connections, they were also creating new connections between different generations. These shared experiences help bond our far-flung University communities to each other, and they link our past and our future.

“Connections” was a key theme of my Spring Welcome remarks to faculty and staff at the beginning of this semester, and I find it a powerful characteristic of Humboldt State.

And this topic comes up often when people talk about Humboldt State. I started hearing stories of connections on my very first day on the job last summer—on campus, in the community, and beyond. I’ve also heard many stories about connections from an alumni advisory group that has been sharing ideas with me by email this year. These graduates, who are from the classes of 1956 through 2014 and live across the country, have shared positive thoughts



about HSU along with ideas for improvements. They have jumped at the chance to share stories about connections that made an important difference in their lives. I am deeply grateful for their insight, advice, and stories.

A recent alum from this group told me that she wanted me to know “how I had the opportunity to become very involved on campus, how much the faculty in my department supported me (and still do), how many friends I was able to make.” Another wrote: “HSU is a home to me ... because of the students, staff, faculty and community members.” And another wrote: “During my time at HSU I don’t recall ever coming across a person, teacher or student, who conveyed anything other than appreciation for being at HSU.”

One alum shared this story of a professor pushing him to try harder: “During a conversation one day he told me that I could do much better in finance if I put in more effort than I was giving it. Basically, he politely called me out on my BS which very few people ever did—and he was 100 percent correct in his assessment.”

This really is a strong and connected community here at HSU. I count myself among those who feel very fortunate to have discovered it and to have become a part of it.

On a related note, a new college ranking from a group called niche.com recently included Humboldt State as the 12th friendliest university in the country. Among public institutions, HSU ranks no. 1. I don’t know how scientific that survey was, but I believe it intuitively. I want to believe it is true, and all my evidence tells me it is.

In this magazine issue, you will find many stories that connect ideas, history, planning, and people. Thank you for your ongoing support of Humboldt State—and for staying connected. I hope to see you on campus soon!

With very best wishes,

*Lisa A. Rossbacher*

Lisa A. Rossbacher, Ph.D.  
President

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Blog: [humboldt.edu/president/blog](http://humboldt.edu/president/blog)

# Humboldt

The Magazine of Humboldt State University

[humboldt.edu/magazine](http://humboldt.edu/magazine)

*Humboldt* magazine is published twice a year for alumni and friends of Humboldt State University and is produced by University Advancement. The opinions expressed on these pages do not necessarily reflect the official policies of the university or those of the California State University Board of Trustees.

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## On the High Seas

Ladies and Gentlemen:

I thought that the name “Coral Sea” was vaguely familiar when I read about Humboldt’s research ship. No wonder—I went on a two-day charter diving trip on the boat in 1975. Most of the charter dive boats in Southern California were fairly “basic”—a small galley, narrow bunks, a dive deck; but the “Coral Sea” was luxurious for the time. It was a great trip—calm seas, fine weather, great diving day and night in the kelp beds along Santa Cruz Island, abalone and rock scallops for dinner as well as steak!

If you really want to know more about the boat during its days as a charter vessel, check out old issues of “Skin Diver” magazine. Glenn Miller was featured repeatedly, along with the dog. I seem to recall that Glenn stirred up some trouble in California with an article about gold on the 1853 wreck of the “Winfield Scott” at Anacapa Island. The old side wheeled shipwreck was not protected in the 1970s, and Glenn’s article set off a frenzied scramble to look for nuggets. Well after 1980, when Anacapa Island and its holdings became part of a national park, some folks forgot about the protected status, got caught with gold or other artifacts, and received hefty fines.

## Mary Wicksten

Bryan, Texas,  
B.A. Biology 1970, M.A. 1972

**EDITOR’S NOTE:** The boat became the Coral Sea when HSU took possession in 1998.

## Too Many Copies

Dear Humboldt,

Today I was delighted to see my Fall 2014 *Humboldt* magazine in my mail. I look forward to stealing some moments over the next few days to read it.

I was less delighted to also see a copy for my daughter, an HSU sophomore, and yet a third copy addressed to me and my husband.

You are a campus which proudly supports ecological sensitivity and responsibility. We like that very much. You include the Rainforest Alliance Certified and Forest Stewardship Council stamps in your magazine. How then has it not been the case that your mailing list be reviewed and corrected for duplicate addresses?

I see this happen often with mailings from many organizations and it pains me. Isn’t there someone at *Humboldt* magazine who can figure out how to edit the mailing list so that the same household with the same address and same last names only receives one magazine?

Sincerely,

**Bertha Rohrbach**

HSU Class of 2017 Mom

**EDITOR’S NOTE:** If you received multiple copies of *Humboldt* magazine last semester, we apologize! We tried out a new mailing system, which resulted in some households receiving multiple copies. With this issue, we think we’ve fixed the problem. Thanks to all of you who wrote in notifying us about it. Happy reading!

**LETTERS ARE WELCOME** and may be published in upcoming issues of *Humboldt* magazine. Letters may be edited for length and clarity. Send to [magazine@humboldt.edu](mailto:magazine@humboldt.edu) or the address listed below.

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[humboldt.edu/social](http://humboldt.edu/social)





The Student-Parent Support Initiative helps students with children connect with each other and find support.

# Support System for Student Moms and Dads

**FROM GETTING ENOUGH SLEEP** to making good grades, being a college student is a constant juggling act. But for students who are also parents, finding that balance can be even more challenging.

To help, a group of Humboldt State University students has founded the Student-Parent Support Initiative, a place where students who are pregnant or have children can connect with each other and find support.

“Student-parents are not only dealing with the normal college stresses of budgeting and being successful in their majors, but they’re also responsible for raising their children while juggling school, work and home life,” says Child Development major Kayla Masengale, who conceived the idea with fellow senior Kathy Jiang.

“These students are highly motivated, but they also need additional support to succeed,” Jiang says. “Our first step is determining who they are and hearing their needs directly from them.”

Masengale and Jiang are working with on- and off-campus groups to identify HSU’s student-parent population and educate the campus and the public about their unique challenges. They plan to eventually create a resource book identifying campus and community resources available to student-parents.

The Institute for Women’s Policy Research estimates that about 25 percent of college students in the United States are responsible for dependent children and that most are first-generation college students from underrepresented backgrounds. In addition to working full time, most spend an average of 30 hours a week taking care of their children.

“Our goal is to establish a network for student-parents at HSU and then empower them to continue the dialogue and support each other,” Masengale says.

► **About 25 percent of college students in the United States are responsible for dependent children, according to the Institute for Women’s Policy Research.**

► **Most are first-generation college students from underrepresented backgrounds.**

# Professor Makes Good Neighbor for Freshmen

**HUMBOLDT STATE** is giving students a unique opportunity to interact with faculty in the residence halls.

Through the Faculty-in-Residence program, faculty members live side-by-side with students, hold office hours, and organize academic and extracurricular activities to introduce freshmen to campus.

“Believe it or not, you do actually get living quarters fit for humans,” jokes Geography faculty member Amy Rock, the program’s first participant. She lives on the first floor of Sunset Hall, where she serves as the resident faculty member for 200 freshmen. Her private living quarters include a bedroom, bathroom, kitchen, living room and office, where she meets with first-year students.

As the Faculty-in-Residence, Rock supports freshmen in a number of ways. She interacts with students on a one-on-one basis outside of the classroom, answers questions about academics and support services, and acts a bridge between students and the university administration.

“A lot of our freshmen are first-generation students, and sometimes they are shy about asking for help and interacting with faculty,” she explains. “My job is to be there to help break down those barriers. I also do a lot of little things to get them acquainted with campus.”

As a recently hired faculty member, Rock was searching for housing options when she received an email about the



Unlike community advocates who organize social events for other students in the residence halls, Faculty-in-Residence develop both social and academic programming for freshmen. Rock organizes guest speakers, field trips, arts and crafts night and a math and science tutoring session through the Learning Center.

Students often come to her with activity and programming suggestions. “Having a faculty member in the residence halls, allows us to do a broader range of activities,” says Michelle Goldberg, a freshmen biology major from Laguna Hills, Calif. “It’s an awesome program, and I hope it stays.”

**TOP:** Geography Professor Amy Rock hosts arts and crafts night in the Sunset residence hall. **BOTTOM:** Rock’s digs include a bedroom, bathroom, kitchen, living room and office, where she meets with students.

Research shows that faculty-student interaction outside the classroom is positive for many reasons:

- GPA
- Graduating with honors
- Degree attainment
- Moving on to graduate or professional school
- Career preparation

Faculty-in-Residence program from her department chair. The application process was extensive and included interviews with Residence Life and Academic Affairs. Rock says the position is the perfect fit.

“It absolutely dunks me in the middle of the campus community and gives me a reason to approach people,” she says.

# Professor Receives Prestigious CSU Award



Arne Jacobson

**ARNE JACOBSON** (’97, MS Environmental Systems), a faculty member in the Environmental Resources Engineering department and director of the Schatz Energy Research Center, is one of five recipients of the 2015 California State University Wang Family Excellence Award.

The award celebrates CSU faculty and administrators who, through extraordinary commitment and dedication, have distinguished themselves by exemplary contributions and achievements in their academic disciplines and areas of assignment.

Jacobson’s work supports widespread use of off-grid power systems that provide affordable and reliable energy to low-income people in Africa and Asia. Closer to home, he’s involved in renewable energy projects that are relevant to California.

His teaching areas include senior level energy design courses in the ERE program and graduate seminars in the Energy Technology and Policy option of the Environmental Systems graduate program. He also focuses on leading thriving research programs and, to date, has served as principal investigator (PI) or co-PI on clean energy projects that have brought more than \$11 million to campus. Jacobson joins previous HSU Wang Award winners, Eugene Novotney and Stephen Cunha.

# Running Keeps You Young

**A NEW STUDY** by researchers at Humboldt State University and the University of Colorado, Boulder, is shedding light on an unexpected benefit of jogging in older adults.

The study looked at adults over the age of 65—some of whom walk for exercise and some who run for exercise. The researchers found that those who run at least 30 minutes, three times a week were less likely to experience age-related physical decline in walking efficiency than those who simply walked.

In fact, the older runners were 7 to 10 percent more efficient at walking than those who didn't jog.

"What we found is that older adults who regularly participate in high aerobic activities—running in particular—have what we call a lower metabolic cost of walking than older, sedentary adults. In fact, their metabolic cost of walking is similar to young adults in their 20s," said Justus Ortega, a Kinesiology professor at Humboldt State and director of HSU's Biomechanics Lab.

Metabolic cost is the amount of energy needed to move and naturally increases as we age. High metabolic cost contributes to making walking more difficult and tiring. Decline in walking ability is a key predictor of morbidity in older adults.

In the study, researchers looked at self-reported joggers—those who ran at least 30 minutes a day, three times a week—and self-reported walkers, those who walked three times a week for 30 minutes.

Participants were asked to walk on a treadmill at three speeds (1.6, 2.8 and 3.9 mph) as researchers measured their oxygen consumption and carbon dioxide production.

Overall, older joggers were 7 to 10 percent more efficient at walking than older adults who just walked for exercise. Their metabolic cost was similar to young people in their 20s.

Researchers aren't yet sure what makes joggers more efficient than walkers but they believe it may have something to do with the mitochondria found in cells. Evidence suggests that people who exercise vigorously have healthier mitochondria in their muscles.

"The bottom line is that running keeps you younger, at least in terms of efficiency," said Rodger Kram, a professor of Integrative Physiology at the University of Colorado, Boulder, and a co-author of the paper.

Future studies are planned to examine whether other highly-aerobic activities—such as swimming and cycling—also mitigate age-related physical decline.

- ▶ **Participants walked on a treadmill at three speeds (1.6, 2.8 and 3.9 miles per hour) as researchers measured their oxygen consumption and carbon dioxide production.**
- ▶ **Older joggers were 7 to 10 percent more efficient at walking than older adults who just walked for exercise.**
- ▶ **Their metabolic cost was similar to young people in their 20s.**

“... older adults who regularly participate in high aerobic activities ... their metabolic cost of walking is similar to young adults in their 20s.”

Professor Justus Ortega



*El Leñador* Editor-in-Chief Manuel J. Orbeagozo looks over the November edition of the Spanish-English newspaper with Layout Designer Lorrie Reyes.

## Bilingual Newspaper Serves Campus and County's Latino Population

**HUMBOLDT STATE'S** Spanish-English newspaper, *El Leñador*, has expanded its reach into the community, offering local news coverage, features, and opinion pieces to areas of Humboldt County with more prominent Latino populations. The monthly publication features the work of HSU students representing a variety of academic disciplines.

"People are excited about writing for our publication because they can produce stories they're able to connect with, personally," says Editor-in-Chief Manuel J. Orbeagozo.

Marcy Burstiner, chair of the Department of Journalism & Mass Communication, has long seen a need for a Spanish language newspaper at HSU. When news came in 2013 of HSU's pending status as a Hispanic Serving Institution, Burstiner felt the time was right. She partnered with Rosamel Benavides-Garb, chair of the Department of World Languages & Cultures, to move forward.

They secured a faculty-student collaboration grant from the College of Arts, Humanities & Social Sciences for students to begin examining the possibilities. Eventually, they worked together to acquire more funding, including \$3,780 in alumni gifts from the Humboldt Loyalty Fund, which supports student scholarships, research, academic programs, and other special projects. With that support, they were able to cover the 2013 pilot issue and another year of publications.

Initially, the paper ran as a monthly insert in HSU's student newspaper, *The Lumberjack*, until this past October when *El Leñador* became an independent publication. Now, to survive independently, it will have to develop an ad sales component and incorporate more business planning. But even as a self-sustaining project, Burstiner believes it still has great potential for academic purposes.

"I see *El Leñador* as an eventual anchor to a bilingual journalism minor," she says.

## New Support for HSU Programs

▶ **THE FORESTRY & WILDLAND** Resources Department has received a four-year, \$1 million grant from the U.S. Department of Agriculture to increase enrollment, retention, and graduation of Hispanic and other underrepresented students in forestry, range and soils.

The grant will fund a multi-year partnership with Reedley College in Reedley, Calif. and Bakersfield College in Bakersfield, Calif., two Hispanic Serving Institutions that offer programs in natural resources.

"Partnering with these institutions will create an excellent opportunity to recruit underrepresented students into the Forestry & Wildland Resources program at HSU," said Associate Forestry Professor Andrew Stubblefield, the project's director.

▶ **A 7-YEAR, \$3 MILLION GRANT** from the U.S. Department of Education will help HSU support its Gaining Early Awareness and Readiness for Undergraduate Program (GEAR UP), which helps at-risk students in Humboldt and Del Norte counties prepare for and succeed in college.

Through the program, the University will work with local partners to provide low-income, disadvantaged students and their families support services including mentoring, counseling, tutoring, college-preparatory courses, information about college, and financial aid options.

▶ **HUMBOLDT STATE UNIVERSITY** has received a second \$1 million endowment gift from the Bernard Osher Foundation.

The assets will expand the endowment, which partially funds the Osher Lifelong Learning Institute, HSU's extended education program for adult learners 50 and better. The foundation's \$1 million endowment for OLLI in 2009 was one of the largest cash gifts in HSU's history at the time.

# Putting Arcata Community Forest on the Interactive Map

**ONE OF THE FIRST THINGS** Brazilian exchange student João Paulo Curti did when he came to HSU last year was buy a bike. He then set off into Arcata Community Forest.

So began Curti's interactive odyssey, a journey that would take him along trails wide and narrow, high and low, and inspire him to create an online map.

To understand what the Forestry major accomplished, one has to understand where he's from. Curti, 24, grew up in Jundiaí, Brazil, and in his backyard is the lush mountain range called Serra do Japi. There, Curti and his friends would venture on their bikes, riding past creeks and waterfalls. He's now a student at Universidade Federal de São Carlos (commonly known as UFSCar) in Sorocaba. For the nature lover, the university in this sprawling city of São Paulo state is nothing like home.

But as luck would have it, the international exchange program placed Curti in a place that was just right for him.

"HSU was a great fit. I had the right major, I liked the size of the town and I also liked that I could ride my bike everywhere."

Taken by HSU's natural beauty, Curti took to what was in his new, temporary backyard: Arcata Community Forest. With a video camera strapped to his helmet, he set off to shoot footage of the trails. He shared the video online to show his family and friends back home what he was doing—and the stunning place he was doing it—in his spare time.

"When I'm in the forest, I have time to think about my life. There's a connection between you and the forest and your bike. It's a kind of therapy," he said.

Inspired to share his enthusiasm about the forest, he eventually decided to create an online map. Armed with his video camera and a LOT of stamina, he returned to the forest again and again.

"It's amazing out there," he said. "People may not know how narrow it is in some places, or what kind of trees there are. My map and the videos on it have all that information."

Indeed. His map lists everything from trail lengths and levels of difficulty to types of trees, plus video from his point of view. He also managed to work in movie references for hiking routes (think "The Lord of the Rings").

► For a link to the map and video, check out [bit.ly/1637sBf](http://bit.ly/1637sBf).



**TOP:** João Paulo Curti, a Brazilian exchange student, created an online interactive map of Arcata's trail network. **MIDDLE:** Curti developed his interactive map as a mountain biker, but hikers and joggers will find the resource equally useful. **BOTTOM:** Curti's next goal is to create a mobile app so that bikers can navigate the trails mid-ride.

## Online Map Offers Glimpse of HSU: Then and Now

**THANKS TO A NEW PROJECT** by Humboldt State Library student-intern Grace Rotwein, anyone interested in local history can now get an online view of the school and Arcata, then and now. Rotwein's "PinIt" project is hosted by HistoryPin, which allows users to pin historical content to Google Maps.

For instance, clicking on the Google street view tab allows users to fade in and out of the historic image and the current scene. One photo illustrates the Arcata Plaza as seen in 1913 and now. Another shows the Founders Hall parking lot, circa 1949, located at the bottom of the steps.

After signing up for an account, visitors can also add their own photos—past and present—and pin video and audio. All components are sorted into digitized collections of HSU and local area content.

A true historian, Rotwein poured through campus archives to find suitable illustrations, labeling, dating, and adding descriptions to each piece. Taking the user-friendly system one step further, she organized the elements into collections and tours of campus, complete with mobile access.

► To access the interactive site, visit: [historypin.org/channels/view/57805/#!photos/list](http://historypin.org/channels/view/57805/#!photos/list)



HSU Library student-intern Grace Rotwein dug through campus photo archives to add historical images of HSU to Google Maps through a partnership with HistoryPin.

## How Trolls Thrive and Survive

**COMMUNICATION INSTRUCTOR** and alum Whitney Phillips' recent book, *This is Why We Can't Have Nice Things: Mapping the Relationship between Online Trolling and Mainstream Culture* traces the emergence and evolution of online trolls, who post inflammatory, upsetting, and off-topic comments on the Internet to elicit reader reactions.

In the book, Phillips looks specifically at the birth of trolls on 4chan, an imageboard site and one of the Internet's most active trolling hotspots. Drawing on thousands of hours of participant observation, dozens of formal interviews, and research, Phillips argues that the troll problem is actually a culture problem.

"The problem is with the culture," explains Phillips. "It's not that trolls should be let off the hook ethically," she says "but the culture that allows these bad behaviors to flourish—sexism, racism, ableism, identity-based harassment—needs to be addressed. Trolling just naturally emerges out of this cultural milieu."

Phillips is a 2004 graduate of HSU's Philosophy Department. Her academic specialties include computer-mediated communication, online antagonism, digital ethnography, participatory media, American pop culture, and humor.



## CampusScene | The Business of Raising Fish

**THE CAMPUS FISH HATCHERY** recently received a major upgrade, thanks to alumni gifts to the Humboldt Loyalty Fund, which supports student scholarships, academic programs research, and other special projects.

Originally built in the 1950s, the hatchery's massive overhaul included the installation of a Recirculating Aquaculture System, or RAS.

RAS is a closed system that continuously filters and reuses water, enabling intensive fish rearing. It also requires a small amount of water

and releases little or no pollution, minimizing its environmental impact.

Because the system is centrally filtered, it allows students to replicate experiments much more easily. "They can control and address water conditions without stressing fish," says Hatchery Manager Sabine Mader. "They can even reproduce experiments months or years later."

Overall, the improvements give students in Fisheries,

Biological Sciences, and Environmental Resources Engineering hands-on aquaculture experience and valuable professional skills.

Did you know that the Hatchery also raises and sells steelhead trout and coastal cutthroat trout? It's also the only facility on the North Coast to raise cutthroat trout. The sales program provides student volunteers and technicians with experience raising trout—from eggs to mature fish.



**LEFT:** These plastic biofilter media remove ammonia from the water, which is toxic to fish. **ABOVE:** A student measures the length and weight of a juvenile trout. **RIGHT:** Students monitor the fish's health and maintain a delicate balance of bacteria.



# Why I Said 'Yes!'



**It's that time of year!**  
High school and transfer students recently received their HSU acceptance letters and posted the good news online.

*Here's a sampling ...*

► Stay connected with Humboldt State on social media at: [humboldt.edu/social](http://humboldt.edu/social)

**Received mail filled with goodies today from HSU #HSUsaidYES**  
[gracecoffeehart](#)

**The best letter to come in the mail!! Can't wait to attend!!! #HSUsaidYES**  
[monicalazur16](#)

[holyhoarderofplants](#)



Newly adopted mascot!  
[#HSUsaidYES](#) [#lumberjack](#)

**Omg guys I've been accepted to Humboldt State University!!! I'm so happy right now!!!! #HSUsaidYES #omg #so #happy #right #now #yassssssss**  
[socorro101](#)

**#HSUsaidYES and tonight so did I. I'm so glad to become a Lumberjack!**  
[kaitlyndawn08](#)

[wicca\\_kitty](#)



I'm so happy! Awesome way to be starting this new year  
[#HSUsaidYES](#)

**I can not believe I actually got in to my number one choice. I'm so blessed and could not have done this without my family & friends. I'm so scared and freaking excited to start my life with this amazing school. #HSUsaidYES #Humboldt #classof19**  
[rena\\_colada](#)

[khaoslucario](#)



YEEEEESSSSSSSS BEEN RUNNING AROUND THE HOUSE SCREAMING GOT MY ACCEPTANCE LETTER INTO HUMBOLDT!!!! [#kneeslide](#) [#Collegeacceptance](#) [#Life](#) [#Happy](#) [#HSUsaidYES](#)

[ichibanpancakes](#)



Best ENVs school in California (middle of the red woods and north coast) [#HSUsaidYES](#)

**Yeeesss to Humboldt!!! #HSUsaidYes #IGotAdmitted #LikeABoss #Yay #ByebyeFresno**  
[centeno\\_93](#)

[\\_laura\\_lz](#)

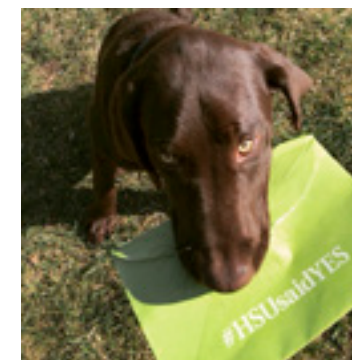


Can't wait to pack up our bags and start this AMAZING adventure!! [#tobothofus](#) [#HSUsaidYES](#)

**NorCal is calling, and I must go. #HSUsaidYES #california #norcal #viewofhsu**  
[leeeebaker](#)

**I can't even begin to explain how much getting this made me feel. It's beyond words. All I can say is that I'm excited for college and to start another chapter of my life & that It's the first of many! #HSUsaidYES**  
[lizology\\_](#)

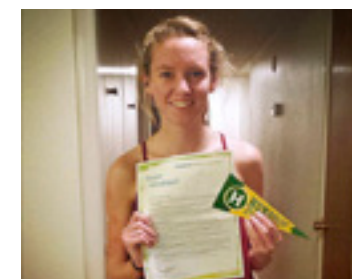
[hahaconda](#)



Bruno tried helping me open my letter.... [#HSUsaidYES](#) 💚💚

**Excited to start the next part in my life! #HSUsaidYES**  
[mr\\_french\\_fry](#)

[megan\\_moore7185](#)



Humboldt bound!  
[#HSUsaidYes](#) [#imgoingtocollege!](#) [#dreamschool](#) [#ecstatic](#)



**Meanwhile,** alumni shared on Facebook why they chose Humboldt State.

**Here's what some of them had to say.**

Small class sizes, access to professors—not just TAs— beautiful campus, and the surrounding area. I loved living in Humboldt so much I stayed after graduating.  
Alessandra Stovall

**Once I made the decision to be a Forestry major, I knew HSU was the place for me. 2014 is my 25th year with the U.S. Forest Service as a permanent employee.**

Janelle L. Thompson  
(Forest Management, '93)

The right size school and the right atmosphere for me. I have a football player son and I am encouraging him to consider HSU for the same reasons.

Barbara Wiggins

Most authentic, organized, proactive, innovative, beautiful, (I could go on), University/College I have ever been to (I've attended 5 in Calif.). Definitely miss it!!!

Meghan Garcia

I wanted out of Santa Clara County, Silicon Valley in the late 1980s. I opened a map and pointed to Humboldt. It was nice, but it was nice and affordable.

Dan Haley

... once I arrived, I fell in love with the redwoods, the small class sizes, the great faculty, and my fellow students. 40 years later, I still love it.

Kathy Dunn

**My grandmother was an HSU grad in the '30s and she loved to tell stories of life at HSU. I went, loved it too ..."**

Michel Nelson-Whitney

*“We have a migratory pulse of bats coming through here this time of year. It’s a wonderful opportunity to get our hands on a lot of bats and do some hands-on training.”*

*Biology Professor Joe Szewczak*

# Things That Go **BAT** in the Night

Dan Pambianco

It’s 30 minutes after sundown, and the temperature has dipped just as the action is heating up. Strung between poles straddling Bull Creek in Humboldt Redwoods State Park are rows of fine netting, waiting to capture tiny creatures that will soon emerge, seeking their evening meal.



Ted Weller ('00, MS Wildlife) examines a hoary bat (*Lasiurus cinereus*) as part of a study of the species' migration patterns.

REDWOOD SCIENCE LABORATORY Ecologist Ted Weller ('00, MS in Wildlife) works with a group that includes RSL lab techs, HSU undergraduates, and Biology Professor Joe Szewczak and his graduate students, who combine their labor for a variety of research projects related to bats. All team members—including Weller—have either graduated from, currently attend, or teach at Humboldt State.

“This requires us to be in the field nearly every night of the week,” says Weller. “Doing so requires quite a crew of folks who are trying to balance schoolwork, their own fieldwork, and sometimes jobs outside their fields.”

Involved in solving several bat-related mysteries is a team of 14 who have covered the evening shifts six days a week. One of the questions they hope to answer is if the bats are in town for a brief vacation or if they’ve set up residence for the winter.

“Ted has discovered we have a migratory pulse of bats coming through here this time of year,” says Szewczak, who partnered with Forestry Professor Steve Sillett on a recent study of bats in the redwood canopy. “It’s a wonderful opportunity to get our hands on a lot of bats and do some hands-on training.”

The location has proven ideal, supplying ample population numbers to accommodate research. Other researchers may have only captured a dozen hoary bats over the course of a career, but that many and more can be captured on a single night in Humboldt Redwoods.

On this particular evening, the seven-person crew’s duties include capturing the bats, fitting them with data chips, and extracting tissue samples. Graduate student Jeffrey Clerc’s research focuses on fat tissue biopsies of silver-haired bats, which should identify food sources and provide possible clues to migratory patterns.

“This research is largely exploratory and we don’t know what the outcome will be,” Clerc said. “Best case scenario is that it gives us the results we hope for and we are able to answer questions about how redwood forests are used by this species.”

All procedures are conducted with a priority on the 1-ounce creature’s safety and comfort. As soon as bats are gathered from the netting, they’re gently placed in a cloth sack, which crew members snuggle close to their chests to keep the bats warm on the way to the on-site analysis station.

By the glow of head lanterns, Weller and graduate student Alyson Brokaw examine a hoary bat, a migratory species

found throughout most of North and South America. They record data that includes weight, size, gender, age and reproductive status, also checking for health concerns. The last step is injecting a tiny transponder under the bat’s skin.

Weller, who has worked with the U.S. Forest Service’s Redwood Science Lab since 1996, is particularly interested in the travels of the hoary bat. Evidence indicates that hoary bat populations have been impacted by wind turbines.

“I began looking into questions of bat fatalities at wind energy facilities in 2007,” Weller says. “I have now worked at two different wind facilities in Southern California measuring the echolocation activity of bats and their fatalities at these sites.”

“The link to my local work is that migratory tree bats, in particular hoary bats and silver-haired bats, make up a large proportion of the bats killed at wind energy facilities. Hoary bats in particular make up 25 to 30 percent of the bats killed at wind energy facilities in North America. The obvious question is, why?”

Brokaw’s focus has been on social communication among bat species. She hopes to identify whether bats will respond to recordings of other bats’ calls. She continues to volunteer in the field after completing her own study.

Consistent with HSU’s hands-on learning endeavors, the research also represents an intersection of a wide range of individual projects.

Clerc and Brokaw, both of whom are advised by Szewczak, have benefited from the collaboration in multiple ways. Along with the rewards of their research, they’ve had the opportunity to refine techniques and develop their own leadership skills.

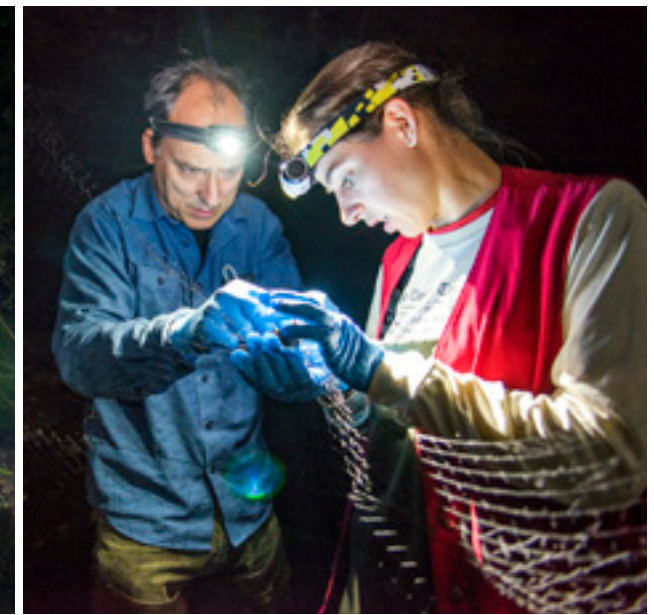
“Alyson and Jeff apprenticed under me to develop their bat handling and overall fieldwork skills,” Weller said. “I benefited in the end because they have become quite competent and can now lead field surveys and help train a whole new cadre of volunteers.”

“One of great things about Humboldt is we have great biology and forestry programs, and we also are lucky to have the Forest Service up the hill,” Brokaw said. “There are a lot of opportunities for field studies. Plus, you get to hang out in redwood forest, which is not so bad either.” 🌲

► For the video, visit: [bit.ly/1Aoxyej](https://bit.ly/1Aoxyej)



Redwood Science Laboratory Ecologist Ted Weller ('00, MS Wildlife) works with graduate student Alyson Brokaw, who learned her bat-handling and fieldwork skills during an apprenticeship with Weller.



**UPPER LEFT:** Fine netting allows for a safe capture of the bats. In the interest of animal safety, time spent in the net is among the data recorded. **UPPER RIGHT:** Biology Professor Joe Szewczak and graduate student Alyson Brokaw carefully remove a captured bat from the netting. **CENTER:** Also for the bat’s safety, the creatures are snugly wrapped in a “bat burrito” while being handled and weighed. **LOWER LEFT:** The research project includes taking tissue samples and inserting tiny transmitters that allow scientists to track migratory patterns. **BOTTOM RIGHT:** Researchers can assess a bat’s age by opening a bat’s wing and examining the knuckle joint.



7:10 AM ^

8:38 AM ^

8:50 AM ^



8:58 AM v

7:41 AM ^

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# SIX to SIX

Daily Life at HSU

6:00 AM - 9:00 AM

From making omelets in the J to grabbing a cup of coffee to-go in the Depot, there's always something going on around campus in the morning. As the sun comes up, students trickle in for their first classes of the day, or return books to the Library after a long night of studying.

6:50 AM

9:00 AM - 4:00 PM

Campus is bustling with activity in the Late morning and early afternoon—especially on the Quad, a popular hangout spot during lunch. Throughout the day, you'll see students conducting hands-on research in campus labs or in the field, and participating in a variety of recreational activities. And professors are busy making lesson plans and grading papers.



3:21 PM ^



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1:25 PM v

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11:25 AM v

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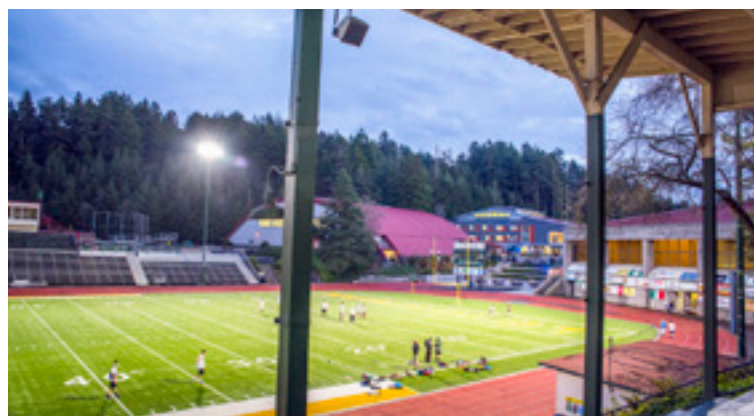
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6:09 PM v



4:00 PM - 6:00 PM

As the day begins to wind down, students attend evening classes and find places to study in the fishbowl or the residence halls. Outside, energy-efficient lighting illuminates intramural practice in Redwood Bowl. As the sun begins to set, you'll see Eureka twinkling over the Bay from the top floor of the Behavioral & Social Sciences building.

5:30 PM

# Surveying the Sea

## Ambitious Study Examines Marine Safe Havens Along the North Coast

By Dan Pambianco

In California and around the world, networks of marine protected areas (MPAs) have been established to promote recovery from pollution, climate change, and over-exploitation of ocean resources. On the North Coast, Humboldt State faculty and student researchers are working to establish a benchmark that will help determine whether the MPA program can safeguard the ocean's bounty for the economic and recreational benefit of future generations.

HSU researchers and volunteers search for sea life in the predawn light as part of their research on the rocky intertidal ecosystem off the North Coast. The group's findings, along with those compiled by other researchers, will help establish a baseline for future studies measuring the effectiveness of California's Marine Protected Areas.



IT WAS 5 O'CLOCK, and the sun had yet to creep above the horizon on a North Coast summer morning, when Sean Craig and his team discovered hidden treasure.

"My crew and I got there, and we were stumbling across rocks in the dark, and somebody said, 'Hey, I see an abalone,'" says Craig, professor of Biological Sciences.

"Somebody else said, 'Hey, I see two.' Pretty soon, I'm looking around, and I see two, three, a dozen abalone within reach just below the water line. That was the first time I'd ever seen anything like that in the intertidal zone. It's how one could imagine Northern California's entire coastline could have looked in the past."

Craig is one of 13 HSU faculty members examining the northernmost region of California's Marine Protected Areas (MPAs), zones designated by the state as reserves where commercial and recreational activity is limited. To Craig, the startling discovery of plentiful mollusks in an unprotected area was an increasingly rare find.

Unprotected zones like this, which usually show the results of overuse, including a decline in habitat and sealife, are important to the team's research. They offer a comparison to the protected areas, which will help scientists determine the effectiveness of MPAs.

Like the redwood forest that lies a short distance inland from its shores, the Pacific coastline of Northern California is a natural wonder. It attracts tourists and other recreational users, from surfers to waterfowl watchers. In years past, it was a highly-productive commercial and sport fishery, and among the key drivers of the local economy.

For decades, these coastal waters have also served as a laboratory for Humboldt State students. Countless research projects and theses have been generated. With a long-standing reputation for excellence, the marine sciences at HSU show no signs of stagnation, and may in fact be experiencing a golden age, thanks to a mix of veteran and new faculty, state-of-the-art equipment and facilities, and new projects.

"Getting out there, getting dirty, and taking part in field research like this is such a wonderful opportunity that can teach you so much and be, in some ways, essential to shaping your goals, interests, and aspirations within your field," says senior Marine Biology major Johnny Roche. "That kind of exposure is unlike any other, it's the real deal."

Roche is one of approximately 40 graduate and undergraduate students working on the MPA baseline project. An expansive and potentially impactful study, the effort represents one of the biggest conservation projects of its kind in the world, according to researchers.

### Conserving California's Coastline

AN INITIATIVE aimed at sustaining coastal resources, the establishment of California's Marine Protected Areas began in 2007, and has been gradually implemented along California's coastline. The North Coast, which stretches from Alder Creek, near Fort Bragg, to the Oregon border, is the final region being studied as part of the program, and like the others, will establish a baseline for future studies of MPAs that will measure their effectiveness. Enter the HSU scientists and students.

The three-year assessment is funded by \$4 million awarded through 10 grants from the California Ocean Science Trust. Humboldt State's researchers received \$2.2 million of that total, and serve as lead investigators on seven of the 11 studies.

HSU's field research, which began in 2014, will continue into the summer of 2015. The final year of the project will focus on data processing and analysis.

Most of the studies include population censuses of marine life in various ecosystems, including estuarine, near-shore rocky reef and kelp forests, mid-depth and deep-water habitats, near-shore fish communities, and sandy beach and surf zones. There are also components that examine seabirds as indicators of oceanographic conditions.



**CLOCKWISE FROM TOP:** Brian Tissot, director of HSU's Marine & Coastal Science Institute, describes the marine life census process to students during a fieldtrip to Old Home Beach in Trinidad. ■ A juvenile kelp crab clings to an undergraduate researcher's hand. ■ Small skeleton shrimp are abundant within clumps of red algae in the intertidal zone. ■ Professor Sean Craig (left) and graduate student Jana Henessy examine the condition of an Ochre sea star for presence of sea star wasting disease.



Graduate student Jason Lopiccolo (on hands and knees) and undergraduate Leslie Booher take sub-samples of a quadrant within an intertidal mussel bed.

"The baseline projects take a look at the abundance and diversity of marine plants and animals in several ecosystems," says Tim Mulligan, professor of Biological Sciences and lead researcher on two of the studies. "The greatest value is getting the snapshot of what's there now. There are places like Pyramid Point, Sea Lion Gulch, and South Cape Mendocino, that haven't been well studied before."

Whether the MPA program achieves one of its goals—an increase in healthy sea life that will populate other areas—is a long way from being determined. And the process itself can be somewhat contentious.

"The state's rolling out of protected areas has involved multiple meetings with tribes and other people, and to make a long story short, not everyone's so keen on it," says Craig. "They've observed the establishment of MPAs, and say, 'you want another area?'"

Addressing that resistance, Humboldt State professors and other researchers worked to form collaborative partnerships. Some hesitation is appropriate, they say, and the reasons behind it need to be respected.

"MPAs are a conservation tool that has been shown globally to be very important, but there's a need to consider every case on its own," says Brian Tissot, director of HSU's Marine Lab and the newly-established Humboldt Marine & Coastal Science Institute. "How it affects the people, locally, is equally important. Ideally, there would be a balance that conserves nature without displacing or disrupting the lives of the people that rely on it."

Of the 1,027 square miles of ocean, estuary, and offshore rocky coastline off the North Coast, MPAs are limited to 137 square miles, or 13.3 percent. Still, the opinion of many scientists is that the protected areas' effectiveness is unproven.

"A lot of people feel the MPA program is a panacea. I see it as one possible tool that might work under the right circumstances," Tissot says. "What's important is how the processes are established. If it isn't done right, it could damage potential conservation efforts in the future."

### Human Dimension

LIKE THE OCEAN FLORA and fauna being studied, the human dimension of the state's MPA effort is diverse. Commercial fisherman, recreational users, and Native American tribes are all impacted by conservation efforts. The latter group's interest is rooted in culturally significant traditions.

Since long before white settlement, the natural resources of the North Coast have been a critical source of sustenance and cultural significance to Indian tribes. In the mid-1800s, a large influx of settlers came to the North Coast, and when the gold rush that lured them slowed in the late 1800s, they turned to other natural resources in the area—massive redwood forests and abundant fishery resources such as salmon, groundfish and crab.

Offering a unique perspective, tribal representatives have been heavily involved in the study. Observation

and information, passed along over several generations of indigenous people, help establish a historical view for the MPA research—a baseline for the baseline.

HSU alumna Megan Rocha ('00, Social Science) represents the Smith River Rancheria and a more expansive coalition of tribes as principal investigator on one of the projects. Having grown up in southern Humboldt County, Rocha has a solid grasp of the local community's history. Representing the Yurok tribe, she was involved early on in California's MPA implementation, and observed what worked and what didn't in other regions. Midway through the North Coast part of the study, she's also observed a difference.

"For a couple of years, when the state first established the MPAs, there was this initial questioning about how the tribes would be involved," Rocha says. "We needed answers about what this means for traditional fishing and gathering rights."

"Before the MPA folks even arrived on the North Coast, there had already been a lot of relationship building. At the end of the day we had fishermen, environmental groups, government officials, and researchers really supporting the tribes. It was pretty amazing. It was a moment when I felt very proud to be a part of this community."

HSU scientists share that feeling, and the benefit of the collaboration will extend beyond this particular study, says Mulligan.

"We're engaged with a group that has just been wonderful to work with," Mulligan says. "They've been generous with their time and resources. Just getting to know the tribal members and how they work and fit into the natural resources picture on the North Coast has been an eye-opener for me. And it's been a lot of fun."

Also impacted by declining ecosystems are commercial and recreational fishermen, many of whom view MPAs as further limiting their already-declining resources.

According to a California State Coastal Conservancy study, the amount of ocean sealife harvest on the North Coast has sat below 45 million pounds per year since 1998, and the value of the catch has dropped to \$50 million, compared to a peak in 1988 of 103.7 million pounds of harvest and a catch value of \$80.4 million. The number of boats also declined precipitously from a peak of 2,550 in 1981 to 500 or fewer boats since 2005. Why and how that is happening are viable questions, and getting to the heart of them is another question researchers are examining.

"Building trust so that people are comfortable sharing information with us is extremely important," says Steve Hackett, chair and professor in HSU's Department of Economics. "That's something we work really hard at—being clear and transparent about our purpose and what we're doing."

"We" includes Hackett, who is taking the lead on the socioeconomic segment of the study, Laurie Richmond, in her third year as a professor of Environmental Science and Management at HSU, and a team of students and volunteers. Richmond's past research and interaction with fishing communities has played an important role in understanding the effects of MPAs.

Richmond's staff conducted interviews of more than 150 individuals, from

the Oregon border to Albion, a Mendocino County town nearly 160 miles south of Arcata. They found some reluctance to accept conservation efforts, but key to building a bridge between the constituencies was establishing an advisory panel of commercial and charter boat operators representing the primary ports and fisheries along the North Coast.

"A lot of fishermen are feeling like all these regulatory decisions are happening and they don't have any control," says Richmond. "The challenge for fishermen is that they're already regulated, and MPAs feels like a new layer. They question how much conversation, how much economic benefit there will be. It's important that they have a voice."

### Finding Funding

ROCHA IS ALSO A PART of Tissot's Marine & Coastal Science Institute executive committee, a group of individuals representing a variety of industries, along with tribal representatives, nonprofit groups, environmental groups, and the government. Input from board members, as gleaned from their constituencies, will help shape future endeavors.

"We've really asked the community, in a broad sense, what issues are they facing, and how Humboldt State can work with them to help solve some of those problems," Tissot says. "What studies do they need, what research do they need, and then collectively, where can we find funding for this."

Part of Tissot's role, with the help of the board and other researchers, is to secure that kind of funding. Most recently, he and HSU faculty members Eric Bjorkstedt and Jeffrey Abell acquired a \$272,000 grant from the National



A student involved in the MPA baseline study examines a chiton, an animal that grazes on algae found on rock surfaces in the intertidal zone.

# North Coast Marine Protected Areas

**MARINE PROTECTED AREAS (MPAs)** along the North Coast stretch from the California/Oregon border to Alder Creek, south of Fort Bragg. State waters in this area cover approximately 1,027 square miles of ocean, estuary, and offshore rock/island waters. Usage restrictions within these areas have been in effect in since Dec. 19, 2012.

The North Coast network includes 20 new or modified areas (19 MPAs and one marine recreational management area), covering approximately 137 square miles or about 13 percent of the area. Seven special closures are also part of the network.

## The Areas are Identified by Four Designations

**STATE MARINE RESERVE**  
Damaging or removing all marine resources (living, geologic, or cultural), including recreational and commercial, is prohibited. There are six of these areas.

**STATE MARINE CONSERVATION AREA**  
Some recreational and/or commercial take of marine resources may be allowed. Restrictions vary. There are 12 of these areas.

**STATE MARINE RECREATIONAL MANAGEMENT AREA**  
A designation limiting recreational and commercial take of marine resources while allowing legal waterfowl hunting. There is one SMRMA.

**SPECIAL CLOSURE**  
Areas prohibiting access or restricting boating activities in waters adjacent to sea bird rookeries or marine mammal dry land sites. There are seven Special Closure areas.

**STATE OFFSHORE BOUNDARY**  
Three nautical miles



# North Coast Marine Protected Area

## Baseline Study

HSU researchers are examining the current state of marine life in protected and unprotected areas to provide baseline information for future research. Here's a look at what they're studying to create that reference point.

### Estuarine Ecosystems

Frank Shaughnessy, Lead Researcher, Botany

Timothy Mulligan, Fisheries Biology

Plants, invertebrates, and fishes in tidal mudflats and eelgrass beds in four of the previously less-studied 16 major North Coast estuaries.

### Sandy Beach and Surf-zone Ecosystems

Sean Craig, Lead Researcher, Marine Ecology

Timothy Mulligan, Fisheries Biology

Shorebirds and the habitat of invertebrates they feed upon.

### Rocky Intertidal Ecosystems

Sean Craig, Lead Researcher, Marine Ecology

Andrew Kinziger, Fisheries Biology

Biodiversity of approximately 25-30 fish species that inhabit North Coast tide pools.

### Rocky Reefs and Kelp Forests

Sean Craig, Lead Researcher, Marine Ecology

Ryan Jenkinson, Biological Sciences

Density of macroinvertebrates, macroalgae, and benthic fishes, and populations of red sea urchin and red abalone.

### Fish Communities Associated with Rocky Reef Habitats

Timothy Mulligan, Lead Researcher, Fisheries Biology

Dave Hankin, Fisheries Biology

Drew Barrett, Fisheries Biology

Status of nearshore rocky reef fish in four of the region's MPAs.

### Seabirds

Richard Golightly, Lead Researcher, Wildlife

Daniel Barton, Wildlife

Reproductive rates, diet, and related interannual variance at select colonies to identify how the marine predators are being affected by the MPAs.

### Human Uses and the Socioeconomic Dimensions of MPAs

Steven Hackett, Lead Researcher, Economics

Laurie Richmond, Environmental Science and Management

Status of the region's fishing communities.

### Oceanographic Conditions

Eric Bjorkstedt, Lead Researcher, Fisheries Biology

Brian Tissot, Humboldt Marine & Coastal Science Institute

Processes that drive the region's biological variability.

**Note:** Representatives from UC Santa Cruz, Sonoma State, UC San Diego, UC Davis, and San Jose State are also involved on a number of the listed projects, and four other initiatives. Also involved in the MPA study are representatives from the Bodega Marine Laboratory, H.T. Harvey & Associates, the Wiyot Tribe, Smith River Rancheria, Reef Check California, Crescent Coastal Research, Point Blue Conservation Science, InterTribal Sinkyone Wilderness Council, Cher-Ae Heights Indian Community of the Trinidad Rancheria, Point 97, Farallon Institute for Advanced Ecosystem Research, and Marine Applied Research & Exploration.

Science Foundation to study the effects of low pH and low dissolved oxygen on juvenile rockfish along the North Coast.

"Most of our faculty teach many classes, which limits their time to do research," Tissot says. "If somebody can facilitate the funding efforts, it makes it easier for everybody. The time that they do have is then spent doing the research and working with students, which is what you want them to do."

Mulligan, the Biological Sciences professor, is semi-retired from teaching and has increased his focus on research. An HSU faculty member since 1987, he is now channeling his energy into a variety of projects.

On a visit to the HSU Marine Lab in Trinidad, Mulligan's enthusiasm is obvious as he shows off the renovated facility. Upgraded plumbing and electrical infrastructure, controlled researched facilities, and attractive displays are all parts of Mulligan's tour, a room-to-room scurry that allows him to keep his busy schedule on track.

"It's been a great undertaking. It's really been brought up to standards," says Mulligan, during a stop in a room filled with microalgae culture experiments. "The students appreciate it. They notice the difference."

External sources—the National Science Foundation, United Plankton Foundation, and Desert Community Foundation—stepped in to fund the upgrades with a total of \$310,000. Individual donors have also provided key sources for development, sometimes through unusual channels.

An example came last spring when, via an alumnus connection, a remotely operated vehicle was gifted to HSU's California Cooperative Fish and Wildlife Research Unit by the U.S. Naval Facilities Engineering and Expeditionary Warfare Center at Port Hueneme, Calif., for use by faculty and students.

### Student Involvement

ANOTHER TRADITION ESTABLISHED in the marine sciences and other Humboldt State programs is hands-on learning. The MPA studies exemplify that approach, with roughly 40 graduate and undergraduate students involved in both fieldwork and data processing.

Katherine Osborn, a graduate student in Fisheries Science who's worked for three seasons with the California Department of Fish and Wildlife, also recognizes the value of student research. Some experiences working on the MPA's estuary baseline study have proven more than routine.

"My favorite moment is still when a male bay pipefish started giving birth on the measuring board," says Osborn. "Yes, we released the babies and the proud papa alive."

A goal of the researchers is to extend the learning opportunity to other campus departments. Richmond and Hackett have seen the benefits, and would like the strategy to spread.

"There's a genuine desire among departments to be interdisciplinary," Richmond says. "I'm on incredible theses committees of students who are bridging fields, doing environmental research and looking at policy at the same time."


Hackett has been a proponent of the interdisciplinary approach for decades, both during his time at Humboldt State

and previously at Indiana University. He, too, appreciates the cooperation.

"Here at Humboldt, the hard scientists understand the significant role of social science components," Hackett says. "People want to be collaborative and work together."

### Will it Work?

STUDENTS LIKE OSBORN and Roche say they appreciate what the North Coast environment offers, and the opportunities Humboldt State's marine science programs incorporate into the student experience. Initiatives like the MPA baseline study offer a glimpse of the present marine climate that drew them here to pursue their education, but follow-up and funding are keys to the future.

"To evaluate the effectiveness of the MPAs, these studies have to be followed up," Mulligan says. "Whether that money becomes available or not remains to be seen, but I think we can make a strong argument that we've got to do follow-up research. We're hopeful that in five years funding will come from somewhere, whether it's state, federal, or private." 



One of the goals of the MPA research is to preserve ecosystems that support wildlife, like this harbor seal in Trinidad.

*"Getting out there, getting dirty, and taking part in field research like this is such a wonderful opportunity that can teach you so much. That kind of exposure is unlike any other; it's the real deal."*

Marine Biology major, Johnny Roche

# GREENING UP HSU'S ENDOWMENT

by Frank Whitlatch

HUMBOLDT STATE UNIVERSITY has moved aggressively to green up its endowment, taking a leadership role in higher education by further divesting from fossil fuels and adopting a broad definition of socially concerning sectors to be avoided. Significantly, the effort involves targeting the institutional mutual funds in which the endowment is invested.

With the changes, HSU joins a small group of institutions nationwide that are looking beyond their direct investments to focus on the more difficult challenge of institutional mutual funds. They include, according to tracking by the group 350.org, Pitzer College in Southern California, and Sterling College in Vermont.

The effort is in part a response to a national, student-led push for universities to divest their endowments from fossil fuels. It is also a natural fit with the University's long-standing commitment to sustainability, and has been advocated for by students locally.

"We're a small school with a relatively small endowment, but we have a long history of leading in social responsibility, in particular, advancing change in environmental stewardship," said Heather Bernikoff-Raboy, an HSU alumna who recently became Chair of the University's Advancement Foundation, which oversees the endowment. "We heard the students, we agree with them, and we are proud to have worked with them to get to this point."

Humboldt State is already at the forefront of socially responsible investing. Unlike at many

universities, its Foundation has never included direct investments in the concerning sectors.

The Board previously adopted the "Humboldt Investment Pledge" in the spring, which significantly expanded the definition of socially concerning investments and included commitments to more strongly consider the social and environmental impact of how the endowment is invested and to actively seek positive investments to offset holdings in the concerning sectors. Following up on that, the Board took a number of steps at its October meeting, including:

- Directing that 10 percent of its overall portfolio, including institutional mutual funds, be shifted to "green funds"—those with no holdings in fossil fuels or other concerning sectors. The goal is to complete this over the next year.
- Reinforcing a long-standing policy of having no direct investments in fossil fuels or other concerning sectors.
- Creating a new investment option that will be invested entirely free of fossil fuels or other concerning sectors and developing ways to invest in campus-based sustainability projects.
- Directing its Development Committee to explore creating a "Green Challenge" offering donor options including an unrestricted permanent endowment in which every \$500,000 donated would allow shifting another 10 percent of the investment portfolio to green funds.

Many students and alumni who had advocated for the changes, and had worked for months with the Board's Finance Committee, were on hand for the full Board's long discussion. They continued to urge the Foundation to do more, particularly in relation to fossil fuel divestment. But they also thanked the Board for taking strong steps forward.

Annette Penny is an HSU student who has pushed for fossil fuel divestment and also now serves as a student representative on the Advancement Foundation Board. She recently submitted a blog post about the campus effort, which was published by 350.org. In it, she recounts some of the reasons for her advocacy—including sending a clear message about "haphazardly extracting finite resources from the Earth in unnecessarily destructive ways."

"It's true that divesting will not topple the industry," Penny writes. "Heck, it probably won't be any more aggravating than a buzzing bee. That's the thing about divesting though, is that it can be done nonchalantly in order to reduce risk. Or it can be done in a loud and proud manner in a way that isn't a single buzzing bee, but a swarm that stings and flaunts the message to the industry that 'we do not support your destructive nature nor will we tolerate it any longer!'"

The HSU Advancement Foundation has never held direct investments in fossil fuels and other concerning sectors.

Its goal now includes expanding to indirect investments inside its institutional mutual funds. It's a much more complicated effort, and one that has proven to be a challenge for universities and other organizations looking to target their investments in a more responsible way. That's because institutional mutual funds provide a low-cost way to reduce risk, particularly for smaller endowments, but they also include holdings in a wide variety of companies that investors don't directly choose.

The ambitious goals include a broad definition of "concerning sectors" and "fossil fuels."

The sectors include those traditionally seen as socially concerning—defense, alcohol, casinos, and tobacco—while the fossil fuel sector definition is much broader than typical, including not only companies involved in extraction, but those that sell energy, provide equipment, and support the industry through various services.

Identifying investments that work within the standards required months of new research and analysis by the Foundation's financial advisor.

"It's true that we can't fix things overnight. Right now, today, we all pay some of these companies that are using fossil fuels to heat our homes, and most of us depend on fossil fuels for transportation," said Duncan Robins, a member of the Board's Finance Committee who took the lead in developing the new policy and approaches.

"But we can imagine a future when that's not true, and taking action now is part of making that future a reality," Robins said. "Someday we want to tell our grandchildren and our great-grandchildren that we did what we could. When we were confronted by the reality of climate change, we tried to be part of the solution."

The decisions at the October meeting follow the Board's April adoption of a new

**"SOMEDAY WE WANT TO TELL OUR GRANDCHILDREN AND OUR GREAT-GRANDCHILDREN THAT WE DID WHAT WE COULD. WHEN WE WERE CONFRONTED BY THE REALITY OF CLIMATE CHANGE, WE TRIED TO BE PART OF THE SOLUTION."**

**- DUNCAN ROBINS**

"Social and Environmentally Responsible Offset and Mitigation Policy." It's known as the "Humboldt Investment Pledge" in recognition of the Graduation Pledge of Social and Environmental Responsibility, which was created by HSU students almost three decades ago and is now used at nearly 100 universities worldwide. 

# Estudiantes de español STUDENTS' SPANISH SKILLS aprenden a traducir TRANSLATE TO en la vida real THE REAL WORLD

By Dan Pambianco



*“You have to make  
a judgment call and  
use critical thinking.*

*Interpreters must  
understand the  
concept of audience.*

*Who is requiring  
their services? Is it a  
university professor  
or a child's parent  
who hasn't had any  
education beyond  
elementary school?”*

Professor Rosamel  
Benavides-Garb



FROM HELPING NON-ENGLISH speaking parents confer with their children's teachers to translating Department of Fish & Wildlife regulations, the hands-on component of Rosamel Benavides-Garb's Spanish 308S class has a variety of applications.

But as important as those roles are, the skills students develop in the Introduction to Translation/Interpretation class might someday have a much greater impact. In fact, they could be the difference between life and death.

“There are many examples of a patient's family being unable to communicate with doctors or emergency room personnel, with tragic consequences,” Benavides-Garb says. “It has meant the difference between the appropriate medicine being given, or how the symptoms were described.”

Benavides-Garb shares those stories with his students to underscore the challenge they're undertaking. Most of the fieldwork they complete, however, has its own challenges and is important in its own right.

Critical to success in the class is understanding the social, cultural, and even legal aspects of translation and interpretation. Without that knowledge, conversations or printed materials can miss the mark.



Rosamel Benavides-Garb translates a Pablo Neruda poem from Spanish to English during a forum featuring a Chilean delegation representing the Corporación Nacional Forestal.

“This isn't Google translate,” Benavides-Garb says. “You have to make a judgment call and use critical thinking. Interpreters must understand the concept of audience. Who is requiring their services? Is it a university professor or a child's parent who hasn't had any education beyond elementary school?”

During fall semester, students had the opportunity to serve both of those demographics. When a Chilean delegation representing the Corporación Nacional Forestal, the equivalent of the U.S. National Park Service, toured the area, translation students served as the communication link between the visitors and local Parks officials.

“It was a great feeling to know that our interpretation helped,” says Jocelyn López Ibarra, one of 26 students in the class. “We came away with a realization that the small exchange between groups gave the scientists access to new resources that could attract attention and ultimately help save the environment.”

While experiences like the Chilean visit are less frequent, a community outreach partnership with the Humboldt County Office of Education has provided many opportunities for Benavides-Garb's students to utilize their skills. Through the partnership, students have translated for parents at Parent Teacher Organization meetings and conferences where children previously had to translate.


“The parents feel like they're participating. They feel integrated into the school system more than they had previously,” Benavides-Garb says. “When my students see that connection being made for the first time, it's a magic moment for them.

Other projects have included developing brochures for the Discovery Museum in Eureka and the California Department of Fish & Wildlife. The translation of the latter group's rules and regulations could have a significant impact on enforcement.

“They found out that many Hispanic people were breaking laws simply because they didn't know the rules,” Benavides-Garb says.

Many of Benavides-Garb's students are already considering careers in the field. Leah Tharp, who is a Recreation Studies major, picked up a minor in Spanish, and is hoping to combine the two and travel throughout South America.

Another student, Yutaro Takahashi, came to HSU after attending the Kanda Institute of Foreign Languages in his native country of Japan. For the first time, he is reflecting on translations and interpretation dynamics between Spanish, English and Japanese. Now, he would like to apply his knowledge to facilitate communications between those cultures.

“Rosamel has given us the knowledge and exposed us to experiences that change a student's entire perspective on the importance of interpretation,” López Ibarra says. “Not only is he a great professor, lecturer and advisor, he's also a great guy.” 

## Lost in Translation

**TRANSLATION AND INTERPRETATION** is a tricky business. Slang, puns, and even simple, direct, messages can confuse, offend or mislead. Misinterpreted medical terms can take a tragic turn, and unintended violations of law might land someone in the slammer, just because they couldn't read the rules. Don't even attempt irony, sarcasm, or idiom.

“For example, saying, ‘he kicked the bucket’ doesn't make sense in Spanish,” says Rosamel Benavides-Garb, chair of the Department of World Languages & Cultures. “With many of these terms, you don't even come close. That's why translators and interpreters must have a great understanding of context.”

Some translations are so bad they can be banned. California State Law prohibits translating the phrase “notary public” literally into Spanish, because instead of translating into “someone who can authenticate signatures and take oaths,” the phrase translates into “government official.”

**Here are some translations that missed the mark:**

**Exit sign at coffee shop:**

**English:** “Exit Only”

**Spanish translation:** “Éxito Aquí”

**Literal:** “Find Success Here”

**American Dairy Association slogan:**

**English:** “Got Milk?”

**Spanish translation:** “Tiene Leche?”

**Literal:** “Are you lactating?”

**Chevrolet introduces its new car, the Nova, in South America.**

**English:** “Nova”

**Spanish translation:** When spoken “Nova” sounds like “no va.”

**Literal:** “It doesn't go.”

**Parker Pens marketing campaign:**

**English:** “It won't leak in your pocket and embarrass you.”

**Spanish translation:** “No te embarazará chorreándose en tu bolsillo.”

**Literal:** “It won't leak in your pocket and impregnate you.”

**Billboard advertising Frank Perdue's Chicken**

**English:** “It takes a strong man to make a tender chicken.”

**Spanish translation:** “Se necesita un hombre duro para enternecer un pollo.”

**Literal:** “It takes an aroused man to make a chicken affectionate.”

**English idiom:** “The spirit is willing, but the flesh is weak.”

**Spanish translation:** “El alcohol está dispuesto, pero la carne es débil.”

**Literal:** “The alcohol is prepared, but the meat is fragile.”

**English Idiom:** “He always speaks his mind.”

**Spanish translation:** “Él no tiene pelos en la lengua.”

**Literal:** “He doesn't have hairs on the tongue.”

# Cleanup & Community

Club helps habitat and builds relationships by Dan Pambianco

AFTER FIVE DAYS of classes, doing homework, and attending to student life in general, Daniel Reyes looks forward to spending Saturday with his friends. But even when he's recreating, the HSU Environmental Management & Protection major is accomplishing something that enhances his education and benefits the community.

As president of Humboldt State's Natural Resources Club, Reyes is one of roughly 20 students that have their weekends fully booked. They meet every Saturday on the steps of the Natural Resources building, then depart for a location where they'll spend the next few hours removing invasive plant species, gathering garbage, and performing other activities geared toward restoring natural environments.

"The club has been consistent for so many years, that in a way, the organizations almost expect us," said Michelle Santillan, the club's events coordinator and an Environmental Science major with an emphasis in ecological restoration. "We just look through their calendar and add the events to ours. They know we're going to be there, rain or shine, and they're always appreciative."

Other organizations tapping into the volunteer workforce include the Trinidad Coastal Land Fund, the Humboldt Fish Council, Friends of the Marsh, and the Watershed Stewards. Most prominent, however, is the City of Arcata and Natural Resources Maintenance Crew Leader Dennis Houghton ('85, Geography, '92, Industrial Technology), who is connected to many of the resources groups.

"There are multiple benefits of the club's involvement in our volunteer work days, not only for the students but also the community," Houghton said. "They're doing important restoration work, and working alongside senior citizens and high school students. That interaction represents a mentoring aspect."

Recently, 17 HSU students joined the Friends of the Dunes in Manila in an effort to thin non-native plants. Like most Natural Resources Club activities, the focus is on returning habitat to its original state.

Another effort helps keep a heavily-trafficked area tidy. The club has taken responsibility for cleaning the stretch of Highway 101 that runs along campus, from Sunset Avenue to 14th Street.

"Community involvement is important, and volunteering is a great way to be engaged," Reyes said. "Here in Humboldt, there are more opportunities for students to take more advantage of than there are in many of the places we come from."

That involvement hasn't diminished the social aspect of the college experience. In fact, it's enhanced relationships with other students representing a variety of majors.

"Our volunteers aren't all science majors," Santillan said. "Many stu-

dents come out because it's fun. You start seeing each other regularly and form friendships."

The activities also fill a common need encountered by new students.

"Many of us have transferred here from outside of the area, and when you arrive in Humboldt, students are asking, 'what is there to do?'" Santillan said. "This club and our activities fill that need. You're exposed to so many beautiful places, even inside of town. For instance, on any given weekend you might be working on a creek you probably wouldn't have noticed."

Reyes sees the experience as one component that helps build the bridge from college education to career. When he graduates in May, 2015, he plans to return home to Visalia, Calif., with a greater understanding of environmental impacts and ecological restoration.

"Volunteer fieldwork has supplemented what I've learned in the classroom," Reyes said. "Ideally, I'd like to work in a city planning department, encouraging more community involvement. Everybody can contribute to making their home a better place to live." 📍

Members of the HSU Natural Resources Club work alongside City of Arcata Maintenance Crew employees to remove invasive plant species at the Arcata Marsh & Wildlife Sanctuary.



"There are multiple benefits of the club's involvement in our volunteer work days, not only for the students but also the community."

Dennis Houghton ('85, Geography, '92, Industrial Technology)



# "Local Lixx"

105.1 FM  
KRFH SHOWCASES HOMEGROWN TALENT  
by Dan Pambianco



Members of the band "Juice Box Theory" Jacob Burns, left, and Jared Margen, tune up their instruments prior to a Local Lixx session.

**ELECTRONICA. JAZZ. RAP. THE ZITHER.** It's all available for your listening pleasure on Local Lixx, the live music show airing weekly on Humboldt State's student-run radio station, KRFH.

A longtime and always-popular standard of KRFH's programming schedule, the show has gained even more exposure since the station received an FCC low-wattage license last spring. Prior to that, listeners had to tune in to KRFH via the Internet, and even earlier, it was only accessible in the residence halls.

WHAT'S BEEN CONSISTENT throughout that evolution is Local Lixx, a one-hour show that airs at 7 p.m. Thursday evenings at 105.1 FM dial and online at [krfh.net](http://krfh.net). The show still features local artists performing live in the studio, but its student managers have broadened the audience through technology while also refining the recording process.

"It's about the local artists. That's the basic, fundamental element that hasn't changed," says Michael Levan (Music) who comprises the three-person management team with Kobe Thompson (Music) and Timothy Lanahan (Journalism).

Those artists—both students and community members—line up for their chance to perform. There's never been a problem filling the docket, and the wide variety of musical genres helps keep the show fresh.

**CHECK OUT** the Local Lixx "Song of the Week" archive at [radiofree-humboldt.squarespace.com/sotw](http://radiofree-humboldt.squarespace.com/sotw).  
One selection from each show is posted for download weekly.

For instance, last semester acts included the jazz combo Business Casual and hip hop artist Katalyst. Improvisational artist Victor Hugo entertained listeners with his talents on the zither, an instrument that could be loosely described as a horizontal harp.

"We don't limit the acts," Lanahan said. "As long as they follow FCC rules and aren't obscene, they can do anything they want. The only rule is the music must be radio-friendly."

Gaining an FM presence has mandated compliance with those FCC rules, but between acts censoring themselves and the in-booth engineer monitoring for slip-ups, no problems have yet to arise.

"So far, it's actually been funny," Lanahan said. "When a rap artist was on, he had his friend go 'shhhhh' to censor words. And the person who is working in the booth can sense if a curse word is coming. There are only so many words that rhyme with duck."

Thompson is the veteran of the team, and will have three years of experience with Local Lixx when he graduates with a Music degree in the spring.

"Soundproofing the recording studio is probably the biggest improvement we've made," Thompson said. "The other major improvements have come in with Michael and Tim's involvement. Michael brought a professional viewpoint to the project with his knowledge of mic techniques, and Tim has done a great job with post-production and promotion. We have a great team here."

As far as the production has advanced, there are still occasions when the team has flexed its creative muscles to come up with old-school solutions. Levan, who has his own in-home recording studio, dipped into his bag of tricks during one session when he and his partners decided an "echo" effect would enhance sound quality.

"We strung together XLR (microphone) cords to reach down the hall, out the door, into the men's room and back," Levan said. "We basically routed the sound to a monitor in the bathroom, where it was picked up by a microphone and sent back to the studio. It worked really well."

Most Thursday shows are more conventional, beginning with the arrival of a six-student volunteer set-up crew at



4:30 p.m. After being briefed by the managers on the week's featured artist, the two-person teams run cables, place microphones, and assist with unloading and instrument set-up for the band's arrival at 5 p.m.

Sound-checks are next, and by 6:45 p.m., managers, engineers, and artists are poised to go live at 7 p.m. At least that's what happens in most instances.


"It can be chaos at times, but we haven't been late yet this semester," says Levan, who is in his third year with Local Lixx. "After the hour is done, the next DJ goes on, and we put everything back. After takedown, we help the bands load up equipment and get on their way. Boom. A Local Lixx session was had."

Lanahan is newest to the management team. He got involved two years ago as a member of the set-up crew, and ascended to a management role last semester. He's embraced the concept of wider availability, creating an online archive of sessions that accommodates anyone who missed the live version.

A recent project he has taken on is "Song of the Week," which features a selection from the previous week's session. Additional post-production refinement brings up the sound standards, and once Lanahan is satisfied with the quality,

he uploads the song to a featured slot on the KRFH website, where it is available for listening and downloading.

Thompson sees his experience with Local Lixx as a step toward a career in music. An accomplished performer with a particular interest in electronic music, he plans to explore the music scene in Germany before returning home to enroll in a graduate program focused on further expanding his repertoire.

"Local Lixx has given me a direction," Thompson said. "I'd like to learn more about recording, and find other opportunities to work in the music world. I might even start my own record label." 

**TOP:** Drummer Aaron Katz and **CENTER LEFT:** guitarist Jacob Burns, performed with their band, Juice Box Theory, during a Local Lixx session. **CENTER RIGHT:** Manager Kobe Thompson has worked with Local Lixx for three years. **BOTTOM:** Members of the band Juice Box Theory listen to a recording of their session with the Local Lixx production crew.

# Class Notes

*Submit a Class Note*  
[humboldt.edu/classnotes](http://humboldt.edu/classnotes) or email: [alumni@humboldt.edu](mailto:alumni@humboldt.edu)

## 1960s

**WAYNE F. HESS, 1964**, Business Administration, spent a number of years as a forensic accountant after retiring as founder of a Portland-area certified public accountancy firm. Currently Hess is the president of the La Pedrera School Project, a registered public charity for the benefit of indigenous students in the western highlands of Guatemala. To date, over 30 students have graduated from high school and one from university, while just 20 years ago it was rare for a student to advance beyond fourth grade. Hess also works with Casa Xelaju, a Spanish Language school in Quetzaltenango, Guatemala, to arrange home-stays with indigenous families while attending classes.

**TIMOTHY E. BLEWETT, 1966**, Fisheries Biology and Environmental Management, became a loss control consultant with Hartford Insurance after more than 21 years in the U.S. Air Force. Blewett later went to work for the Arkansas Workers' Compensation Commission. He retired from the AWCC about 14 years ago, and has since worked as a private contractor doing loss-control work. Sally, Blewett's wife, is a travel consultant, and the couple has been to approximately 35 countries over the last 26 years. About 10 years ago Blewett had an idea for a story, which turned into a 184,000-word, unpublished novel, followed by eight additional novels, also unpublished.

**WILLIAM (BILL) HUFFMAN, 1967**, Journalism, retired after 30 years as Vice President of Communications and Governmental Affairs with Farmers' Rice Cooperative in Sacramento. Huffman and his wife lived for seven years at Lake Almanor, Calif., before moving to Chico, Calif., in early 2014 for medical reasons. His education at HSU (a degree in Journalism and minors in Political Science and Public Relations) provided Huffman with the best academic credentials for his 45-plus years in governmental relations and communications. He earned the rice industry's premier award when he received the California Rice Industry Award in 2009. The couple has four children and three grandchildren.

## 1970s

**MICHAEL GARCIA, 1971**, Geology, was recently named a 2014 American Geophysical Union (AGU) Fellow. Awardees are AGU members who have made exceptional scientific contributions and attained eminence in the Earth and space sciences. Garcia has been a professor in The Department of Geology and Geophysics at the University of Hawai'i at Manoa, Honolulu since 1988. Since joining the University of Hawai'i, Garcia has concentrated on hotspot volcanism, especially on the active Hawaiian volcanoes, Kilauea, Mauna Loa and Lo'ihi. His current research is focused on understanding how volcanoes work. Specifically, he is using the mineralogy and geochemistry of lavas to delineate the magmatic plumbing systems of volcanoes. Basaltic lavas provide essential clues into their subterranean history and are one of our best "windows" into the mantle.

**MARK PASQUINI, 1973**, History and Second Year Teaching Credential, has published the *Phoenix Cycle* series of eBooks. Royalties from the first volume, *Phoenix in Ashes*, were donated to the Wounded Warrior Project in memory of Clay Cunningham.

**ROBERT MAYER, 1975**, Physical Education, has been a physical education and special education teacher for the past 38 years. For the last 20 years, Mayer has served as a high school administrator and has coached several sports over the last 35 years. Mayer met his wife, Sandy, while attending Humboldt and the couple has two children. Mayer writes that he will always be grateful to Franny Givens and Frank Cheek for their friendship and guidance.

**TIMOTHY HAMAKER, 1977**, Fisheries Biology, retired in August after 37 years as a fisheries and aquatic biologist. Hamaker began his career in 1977 and worked for four years as a biologist for the Environmental Protection Agency's Gulf Breeze, Fla., environmental research lab. Hamaker then moved to Environmental Research and Technology Inc., in Ft. Collins, Colo., working as a fisheries biologist. From 1986 to 1988 Hamaker acted as president and principal scientist at

Aquatic BioSystems Inc., also in Ft. Collins. He then spent more than 25 years with CH2MHILL Inc. as a consulting fishery biologist, spending the last 23 years in Redding, Calif. Hamaker is married to Hoagy (Gilliam) Hamaker. The couple has six children, including two HSU grads, Nicholas ('02 and '03) and Robin (Ray) Hamaker ('11), and five grandchildren. The couple resides in Redding, Calif.

**LYNNETTE ZELEZY, 1979 and 1981**, Psychology, was recently named provost and vice president for academic affairs at Fresno State University. Zelezy is a 25-year veteran of Fresno State, having previously served as a professor and psychology department chair, and associate dean for the Craig School of Business, dean for global education, and, most recently, associate provost. Zelezy also serves on the board of the United Way and is a member of the Fresno Rotary. She is married to John Zelezny, senior vice president of communications at Community Medical Centers. The Zelezny's have three grown children.

## 1980s

**DOUGLAS TURNER, 1980**, Biological Sciences, has two sons on the college path. Turner's oldest is a Chemical Engineering major at Cal Poly Pomona and his youngest, currently a high school senior, is applying to HSU.

**TIM KUSTIC, 1981**, Geology, recently retired after a 32-year career with California's Department of Conservation, where he served as California's 13th State Oil and Gas Supervisor. Kustic began his state career as a field engineer with the California Division of Oil, Gas, and Geothermal Resources (DOGGR), in the Bakersfield office. After assignments in the Bakersfield and Santa Maria DOGGR offices, Kustic joined the newly created State Office of Mine Reclamation in 1991. In 2001, Kustic rejoined DOGGR and was appointed by Gov. Jerry Brown to lead DOGGR as the Oil and Gas Supervisor in 2011. Kustic, his wife, Debra, and their three children reside in Sacramento.

# John Collins: The Paper Airplane Guy

**WHEN ALUM JOHN COLLINS** first began folding paper airplanes in elementary school, he had no idea his hobby would one day land him in the *Guinness Book of World Records*.

"Most people get over paper airplanes by the age of 10," says Collins, the self-dubbed Paper Airplane Guy. "I guess I just never grew out of it."

In 2012, Collins' childhood pastime earned him the Guinness World Record for farthest indoor paper airplane flight. His winning glider—"Suzanne"—flew a whopping 226 feet, 10 inches, smashing the previous record by 19 feet, 6 inches.

Collins' interest in paper folding began when his fifth grade teacher brought an origami book to class. From there, Collins got hooked on origami, and eventually, on making paper airplanes. "I always liked the idea of being able to repurpose such a ubiquitous resource like paper," he says. "Most people throw away the exact thing you need to be creative."

Collins credits his winning plane to his team's unique, aerodynamic design. Previous record holders had used a dart-shaped plane, but Collins and his team used a glider. "The first thing we did was change the design so it was a little bit wider and stubbier than the old school paper airplane. It really was a flying machine," Collins explains. They



also switched from using ridged to smooth paper, increasing the thrower's distance by 40 feet.

When it came to selecting a thrower, Collins auditioned three football players before finding 220-pound, former U.C. Berkeley quarterback Joe Ayoob. As it turns out, the act of throwing a paper airplane takes much more than a strong arm.

"At first, it was hard to get someone who wouldn't crush or rip the plane," explains Collins. "Joe has loved paper airplanes ever since he was a kid and

understood the technical aspects of throwing. He had studied the physics, and came up with the perfect way to hold and throw."

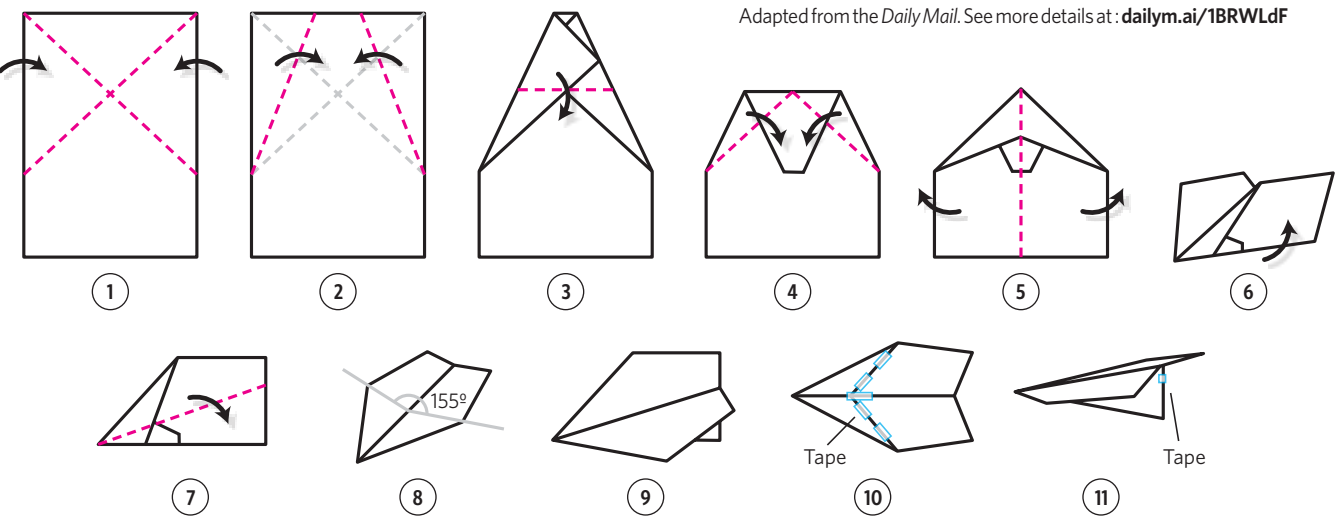
Since breaking the record, Collins has appeared on the "Conan O'Brien Show" and travelled around the world to share his design. His third book, *The New World Champion Paper Airplane Book*, released in 2013, has been translated into two languages.

Collins hopes his recent success will help him achieve another goal: starting the country's first paper airplane league, and launching a national paper airplane-flying contest for kids and adults.

Ultimately, Collins hopes that exposing kids to paper airplanes will get them excited about science. "Kids think that science is just about computer labs, and electron microscopes, and that's really not the truth," he says. "I want to teach kids that science can be fun."

## How to fold the 'Suzanne'

Adapted from the *Daily Mail*. See more details at: [daily.ai/1BRWLdF](http://daily.ai/1BRWLdF)



# Tim O'Malley: Good Sound is Music to His Ears

**NEXT TIME YOU'RE** watching a movie, really listen—to the sound effects, the background music and the dialogue. What you're listening to is the work of a sound mixer.

Tim O'Malley ('11, Film) is one of the people responsible for ensuring that the sound you hear on screen is crisp, audible, and evokes the right emotion. Whether it's capturing flawless audio, ambient noise, or perfect dialogue, O'Malley's job is to create a great experience for your ears.

And like bad acting, or directing, bad sound can mean the difference between a movie or television show that's critically praised or criticized. "You have to know which mic to use and how to position it to get the best result," he says. "Otherwise, it can be really distracting."

Through his work with Impact Productions, a sound production company he founded in 2010, O'Malley has travelled around the world recording sound for film and television. He's done volunteer audio work for the 2014 comedy movie "Neighbors" with Seth Rogen and Zac Efron and the Dove Real Beauty Sketches commercial campaign, which went viral. Along the way, he's met a host of celebrities, including Michael J. Fox, Jane Fonda, Vivica Fox, and Greg Kinnear.

Working in Hollywood means working with a lot of big names—and personalities, he says. "The best and worst part by far is the people. Every time you're on a new gig, you have to prove yourself," O'Malley says. "But once you make a name for yourself, the gigs start coming in."

O'Malley's client list has been growing and recently, he returned to Humboldt to record audio at the Kinetic Grand Championship for Discovery Channel Canada.

Although he was back in town for work, O'Malley still made time to visit friends and his favorite spots. "Arcata is where I go to get away from L.A.," he says. "After five to six months, L.A. gets to be too much. I'll go to Om Shala Yoga, North Coast Self-Defense Academy, eat at Wildberries, and go running in Redwood Park."



**HARRIS FOGEL, 1981**, Art, is a professor of photography at University of the Arts in Philadelphia. Fogel is the director and curator of the University's Sol Mednick Gallery and Gallery 1401 and recently curated "Past Imperfect Time: Work by Faculty at UArts." The exhibit was part of the International Meetings of Photography, an annual photography festival held in Plovdiv, Bulgaria, where Fogel also participated as a portfolio reviewer and lecturer.

**CAROLYN DUNN, 1986**, Communication, was recently named Associate Vice President of Institutional Diversity for Central Michigan University. In addition to her new post, Dunn has contributed to Project Upward Bound, a program that trains students to succeed in college.

**PETER JAIN, 1989**, Music, published his first book of prose, poetry, and photography 25 years after graduating from HSU. *Let the Dance Begin—Greetings from Humboldt* was released in September.

## 1990s

**GARETH ELLIOTT, 1992**, Political Science, was named in January to the University of California system's governing board. Elliott has served as legislative affairs secretary in the Office of the Governor since 2011. He was policy director in the Office of California State Sen. Alex Padilla from 2008 to 2011 and policy director and deputy chief of staff in the Office of California State Senate President pro Tempore Don Perata from 2004 to 2008. Elliott was a legislative aide and then legislative director for Perata from 1996 to 2004.

**PEGGY MOLLOY, 1993**, Art, recently earned a master's degree in Entertainment Business from Full Sail University. Molloy works as a volunteer coordinator for the local Salvation Army branch. She is currently organizing a fundraiser for the needy through Sewell Gallery, in Eureka, featuring portrait artist Meredith Aldrich. Part of the proceeds will benefit the Salvation Army.

**CONRAD L. HUYGEN, 1994**, Geography, retired from the Air Force JAG Corps as a lieutenant colonel after a distinguished military career that also included enlisted service in the Army and the Coast Guard. He served four assignments as a trial defense counsel, was an executive officer to the Assistant Vice Chief of Staff of the Air Force,

and deployed to the Combined Air and Space Operations Center (Combat Operations Division). Huygen and his wife, Julie, plan to stay in the Denver area where he will teach, travel, write, run, cycle, ski, fish, and brew every day the sun shines.

**MICHAEL COLIN BRESNAHAN, 1995**, English, married Natalie Rist in April.

**JENNIFER MOLINE, 1996**, Journalism, resides in Oakland, Calif., and takes public transportation to her job in San Francisco as the social media manager for Skout, a geo-location-based app for meeting people. She lives with her two cats and still tries to get up to Arcata annually to bask in the redwoods and drink the local beers.



Tara Cooper

**TARA COOPER, 1997**, Natural Resources Planning Interpretation, is the owner of Ohana Organics, which recently received the 2014 NEXTY Popular Vote award from New Hope Natural Media and the Sterling-Rice Group for its product, vegan Tattoo Butter. Cooper founded 'Ohana Organics in 2000.



Margaret Malone

**MARGARET MALONE, 1997**, Philosophy, recently published the short story collection *People Like You*. Malone has received fellowships from the Oregon Arts Commission and Literary

# Will Smiley: Genentech's Headhunting Exec

**IF THERE'S ONE** piece of advice Will Smiley ('97, Psychology) likes to give current college students, it's to snag a summer internship (or two) before you graduate.

"It not only helps you get your foot in the door at a company, it also provides you with the opportunity to try out different fields and see what you like," he says.

Smiley is Director of Talent Acquisition at Genentech, a biotechnology company that uses human genetic information to make medicines to treat patients with



serious medical conditions. Considered the founder of the industry, Genentech, now a member of the Roche Group, has been delivering on the promise of biotechnology for over 35 years.

At the company's San Francisco headquarters, Smiley drives recruitment efforts across Genentech's various departments, leading a team of 30 employees

responsible for finding and hiring 3,600 new employees a year.

Using a variety of tools—social media, employee referrals, internal headhunters, and Genentech's own internship program—Smiley and his team comb through thousands of resumes each year. Their goal: to attract and hire the best and the brightest in a range of fields including science, medicine, engineering, marketing and human resources.

"We attract a lot of people who are enthusiastic about living in the Bay Area, who are passionate about what they do and are energized by idea that they can make a difference in people's lives," says Smiley of Genentech's 13,800 employees.

That kind of desire to make a difference is what compelled Smiley to join the Peace Corps after graduating from HSU. After completing a two-year tour in Ukraine, he received a master's degree in organizational management from the School for International Training in Vermont and worked in international development in Washington, D.C., for several years.

After Sept. 11, U.S. priorities abroad shifted and Smiley realized his heart was no longer in international work. In 2007, he moved back to California and jumped into the corporate world, joining Genentech.

Since then, Smiley has been promoted several times, supervising a larger team and taking on additional duties, including managing the company's popular internship and engagement program with universities.

The new responsibilities mean that Smiley scours through even more resumes a year. While he admits that competition for Genentech jobs is tough, he says that Humboldt grads have an edge when it comes to standing out in the application process.

"Humboldt emphasizes getting outdoors and being involved in the community," he says. "That gives HSU students a competitive leg up when they can demonstrate to hiring managers why they're passionate about making a difference."

## Computer Science Alumni Team Up with Local Flower Farm

**WHEN DEVEN SMITH AND TC MAIERO** graduated from Humboldt State with degrees in Computer Science, they never thought they'd be working for a local flower farm.



Deven Smith, left, and TC Maiero

"Honestly, I didn't know what to expect," says Smith ('08, Information Systems). "But the truth is, there a lot of industries out there that need people with computer skills."

Smith and Maiero ('14, Computer Science) helped develop Stargazer Barn, a website for Sun Valley Floral Farms, the national flower supplier based in Arcata. The site sells a variety of Humboldt Made products—Sun Valley flowers, Dick Taylor choco-

late, Holly Yashi jewelry, Tulip perfume, Kinetic Koffee, Laceys Cookies and wine from grapes grown in Willow Creek—that can be purchased as a gift collection or individually, then shipped around the country overnight. It's also the first time consumers can buy Sun Valley flowers and wine directly online.

As the largest cut flower grower in the United States, Sun Valley is a thriving, year-round operation. But Bill Prescott, marketing and communications for Sun Valley said, the company was looking for ways to partner with local businesses to sell its goods online.

"We wanted to give people the opportunity to purchase our flowers, wine and other Humboldt Made products, whether they're living in Humboldt County or somewhere else in the country," says Prescott.

An effective website was critical to Stargazer Barn's success and after an outside contractor built the framework, Sun Valley turned to two Humboldt State grads—Maiero and Smith—to make it work.

Maiero is a software developer at Sun Valley, and Smith is a senior web developer at Precision Intermedia, a local multimedia company hired for the project. Using skills they gained at HSU, the two worked together on making the site functional.

According to Prescott, plans are underway for a national marketing campaign. And as Stargazer Barn continues to grow, Smith and Maiero expect to build on their skills in programming, software and web development. "It's basically been an extension of my schooling at HSU," Maiero says.

Both Maiero and Smith feel lucky to get to work in a field related to their majors—especially in a place as beautiful as Humboldt.

"I had the intention of staying in Humboldt after I graduated and I realized that there are all the same job opportunities up here as in the Bay Area—you just have to be open-minded," says Smith. "I love this area and I don't see any reason to rush down to the traffic anytime soon."

► Go to [stargazerbarn.com](http://stargazerbarn.com) for more.

Arts, two Regional Arts & Culture Council Project grants, and residencies at The Sitka Center and Soapstone. Her writing has appeared in *The Missouri Review*, *Oregon Humanities Magazine*, *Coal City Review*, *Swink*, *Nailed*, *latimes.com*, and elsewhere, including recently the Forest Avenue Press anthology *The Night, and the Rain, and the River*. Malone has taught creative writing as a visiting artist at Pacific Northwest College of Art. She lives with her husband, filmmaker Brian Padian, and two children in Portland, where she co-hosts the artist and literary gathering SHARE.

**PETER SCHMIDT, 1997**, Wildlife, recently accepted the Refuge Manager position at Ruby Lake National Wildlife Refuge in Ruby Valley, Nev., after spending 14 years at Tualatin River National Wildlife Refuge in western Oregon. Schmidt is moving from an urban refuge with 2,200 acres to the most remote refuge in the lower 48 states with almost 40,000 acres to manage. The nearest services are 60 miles when the pass is open.

## 2000s

**TY ROBIN COLLINS, 2001**, Environmental Resources Engineering, was hired as a project manager for Manhard Consulting's Eureka office, a civil engineering firm headquartered in Vernon Hills, Ill.

**CARLEIGH KUDE, 2005**, Politics, has been working in advocacy, accessibility and ADA compliance since leaving HSU. Kude earned a Master of Public Administration from CSU Long Beach in 2014 and was named to the Dean's List of Arts and Humanities Scholars. She is currently working at Holy Names University, a public service and social justice-oriented private university in Oakland, Calif.

**JOE NEWNAM, 2005**, Music, moved to Mammoth Lakes, Calif., upon receiving his music teaching credential. Newnam rebuilt a district-wide public school music program, which resulted in developing middle and high school jazz bands and choirs. After marrying in 2009, he and his wife purchased a small ranch in Trinity County, where Newnam again rebuilt a successful district-wide music program. During the same time, Newnam released "Sitar Joe, Venus Tribe." Selections from the album have been featured on syndicated radio shows,

and broadcast worldwide from the Middle East to India and the U.S. Last year, Newnam and his wife moved to a home on 20 acres in Washington, where the couple raises organic food and animals while caring for their forest. Newnam is currently the owner and lead instructor of a private music instruction studio, plays and studies Kirtan music with a working ensemble, and works as an actor for a Syfy Channel series currently being filmed.

## 2010s

**HARRIET ANN BURR, 2010**, Economics, submitted her thesis, "Recidivism Reduction in Humboldt County," for a Master of Science in Community Economic Development at Southern New Hampshire University. Burr received an A for her work, and has been authorized as a Master of Science. Burr is currently job searching and researching for her Ph.D.

**TERRI BIDDLE, 2011**, Zoology, is beginning a new chapter of her life as a marine education program manager in Southern California. After seven years with the USC QuikScience program, she will be working with ExplorOcean in Newport Beach, Calif., to bring quality ocean exploration to young people.

**TYLER EVANS, 2011**, History and **2014**, Secondary Education Credential, received a Master of Arts in History from San Diego State University after graduating from Humboldt. Evans is currently the AVID program coordinator and elective teacher at Temescal Canyon High School in Lake Elsinore, Calif.

**STEPHANIE FREITAS, 2013**, History, is a full-time history teacher at Mt. Whitney High School in Visalia, Calif. Freitas is married to HSU alumnus Salvador Cazarez, who is also teaching in the Visalia district.

**ANDREW KREAMER, 2014**, Education, is now a behavior interventionist at a kindergarten-to-eighth grade school. Kreamer enjoys the opportunity to engage in one-to-one teaching.

**SYDNEY NEWTON, 2014**, Kinesiology & Recreation Administration, was hired as the community development director for the Girl Scouts of Northern California to oversee recruitment and volunteer support for Sonoma, Rohnert Park, Napa, and Petaluma.

## Cathy Sandeen: New Leader of Wisconsin Colleges

**ASKING A NON-SCIENTIST** to explain science can lead to a subtle, but impactful revelation. For Cathy Sandeen, it was that type of experience that forecast her career.

"I remember early in my time as a student at Humboldt, I was taking a natural resources class to fulfill a science requirement," said Sandeen ('76, Speech Pathology). "One of our first assignments was to sit in the forest by yourself for 10 minutes and write down your observations."

Sandeen recalls that after reading the students' papers, Professor Rudolph Becking said he could tell that a lot of the students were scientists. But the paper he selected to read to the class—Sandeen's—was uniquely non-scientific.

"I'm a liberal artsy kind of person," Sandeen says. "In my paper, I talked about a zillion shades of green, listening to the wind, and how the forest sounded like it was breathing. The professor used it as an example of how scientists need to remember to keep in touch. That's when I realized it's okay to take a chance, to be yourself, and to take a risk on an assignment."

Finding a different way in and challenging the norm is what Sandeen has encouraged throughout most of her career. In December, she assumed the top leadership role as chancellor of University of Wisconsin Colleges and University of Wisconsin-Extension, a system geared toward attracting and accommodating students that might not otherwise find success in postsecondary education.

Following a nationwide search, a 27-member committee representing the state's Board of Regents selected Sandeen to the chancellor position. She is responsible for a variety of divisions, including Wisconsin's 13 liberal arts two-year transfer colleges, its extension learning system, and the Wisconsin Public Radio and Wisconsin Public Television broadcasting networks.

As a student coming to Arcata from the Bay Area, Sandeen felt comfortable amidst the redwoods. Despite the abrupt change from city to rural environment, she found a sense of belonging.

"A lot of the students at Humboldt State were like me, and the faculty were very inspired to teach students like us," Sandeen said. "It was a friendly atmosphere. I would have felt lost at a larger institution."



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If you do not want to receive information from our partners, you may do one of the following:

1. Print, complete and fax this form to 707-826-5148
2. Submit this form online: [alumni.humboldt.edu/privacy](http://alumni.humboldt.edu/privacy)
3. Fill out, sign, and send this form to us (consider making a copy for your records):

Humboldt State University  
Alumni & Engagement  
1 Harpst Street, Nelson Hall East, Room 112  
Arcata, CA 95521-8299

Name (w/Middle Initial)

Address/Zip

Phone

Email

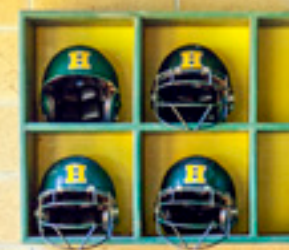
Signature

# Calendar

MARK YOUR

**HSU Softball vs.  
CSU Dominguez Hills**  
**Strike Out Cancer Day**

**April 3 | 1 p.m.**  
HSU Softball Field



**Neil deGrasse Tyson**  
**April 14 | 8 p.m.**  
Van Duzer Theatre

**Humboldt State Honors  
Distinguished  
Faculty & Alumni**

**April 17 | 7:30 p.m.**  
Kate Buchanan Room



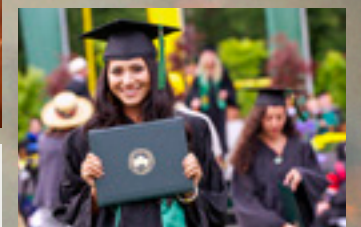
**69th Annual  
California Geographical  
Society Meeting**

**May 1-3**  
Founders Hall  
[humboldt.edu/geography](http://humboldt.edu/geography)



**Excellence in  
Teaching Lecture  
with Professor  
Justus Ortega,  
Kinesiology**

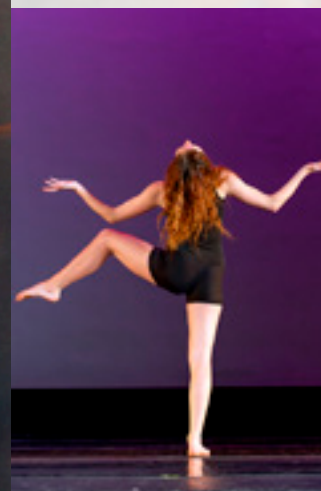
**April 20 | 5 p.m.**  
Van Duzer Theatre



**Commencement 2015**

**May 16**  
**8:30 am** • College of  
Arts, Humanities & Social Sciences  
**NOON** • College of  
Natural Resources & Sciences  
**3:30 pm** College of  
Professional Studies  
Redwood Bowl  
[humboldt.edu/  
commencement](http://humboldt.edu/commencement)

**Spring Dance Concert**  
**April 9-11 | April 16-19**  
Van Duzer Theatre



**IdeaFest**  
**A Celebration of  
Projects & Research**  
**April 17 | 3 p.m.**  
University Library



See more HSU events at: [humboldt.edu/events](http://humboldt.edu/events)

Tickets to most events are available at the **HSU Ticket Office** by calling **707-826-3928**



## things : Rainy Days

However you feel about it, rain is a fact of life at Humboldt State. Which is why a little drizzle doesn't get in the way of students attending class outdoors, hanging out with friends, or having fun.



## meet humboldt

**Humberto Montano** (Art & Art Education)

**HUMBERTO MONTANO** is an abstract painter who grew up in Wilmington, Calif., in south Los Angeles. He's inspired by L.A., Arcata's natural beauty, and the bright patterns, colors and shapes of his Latin American heritage.

**GRAFITTI** "I started doing street art in middle school. All my friends were doing it and it was just a part of the culture. I'm not going to say it was appreciated, because we were vandalizing. But it was my first experience as an artist. Even to this day, I love the graphic style and vibrant colors."

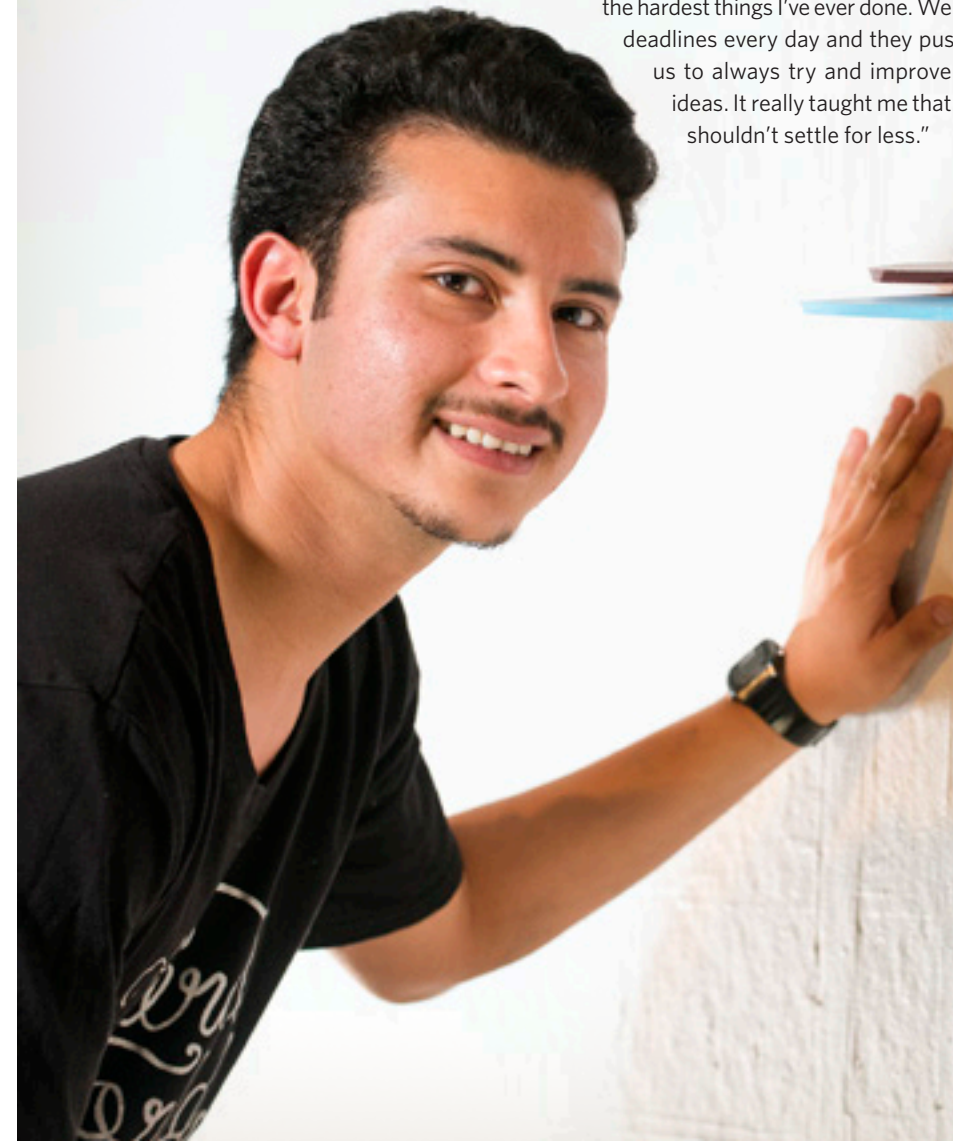
**DIGGING IN** "I'm most passionate about culture and where I come from. My mom is from Guatemala and my dad is from Guadalajara, Mexico. I love to dig in, question, and figure out why I'm doing the things I'm doing."

**SOMETHING DIFFERENT** "When I was in high school, I kind of felt like I wasn't going anywhere. One of my teachers suggested I apply to college. I knew I wanted something different and something opposite from where I grew up. I found it at Humboldt."

**BACKYARD INSPIRATION** "The fact that our backyard is the redwood forest makes it easy to be an artist and self-reflect. In the community I grew up in, people are poor and have a lot of problems. It makes it hard to think about anything else. I realize that I have a lot of opportunity here to grow and learn about myself."


**DON'T SETTLE** "Last summer, I took part in an intensive urban design program at Harvard University. There were students from around the country and only two of us from California. I can say it was one of the hardest things I've ever done. We had deadlines every day and they pushed us to always try and improve our ideas. It really taught me that you shouldn't settle for less."

**A LITTLE ENCOURAGEMENT** "I would eventually like to teach students in an area like where I grew up, but I first want to see where my art career takes me. I was that student who got encouragement from my high school art teacher to take A.P. art. One day, I want to be that person for someone else."



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