Read stories this month in these UNH research areas:

- Agriculture & Biosciences
- Business & Technology
- Engineering & Physical Sciences
- Health, Behavioral & Social Sciences
- Humanities & the Arts
- Marine & Ocean Sciences
- Space Science
- Sustainability & the Environment

Click on the area name at right to jump to that section, or browse through the entire list.

### Agriculture & Biosciences

#### First UNH Bee BioBlitz Documents the Diversity of Bee Species in the White Mountain National Forest

Bee researchers from across New England swarmed the White Mountain National Forest in late June as part of the UNH Bee BioBlitz. The goals of the Bee BioBlitz were to document the diversity of bee species in the White Mountain National Forest, with a particular focus on native bees; connect bee researchers across New England; and demonstrate bee surveys and research techniques to interested students and members of the public. The event was organized by Sandra Rehan, assistant professor of biological sciences, who is conducting the research project “Sustainable Solutions to Problems Affecting Bee Health” that is assessing the Granite State’s bee species for the first time.

[http://colsa.unh.edu/aes/article/beebioblitz](http://colsa.unh.edu/aes/article/beebioblitz)
[http://www.unh.edu/news/releases/2015/06/lw09bioblitz.cfm](http://www.unh.edu/news/releases/2015/06/lw09bioblitz.cfm)

#### Pollinators They Have Known

UNH Extension specialists and NH Agricultural Experiment Station researchers recently held a day-long event to showcase UNH’s efforts to educate the public about pollinators. Pollinators, which include honey bees and native bees, are critical to producing food crops and flowering plants but have experienced declining populations in recent years.

[http://extension.unh.edu/articles/Pollinators-They-Have-Known](http://extension.unh.edu/articles/Pollinators-They-Have-Known)

#### Rick Cote – A Look Inside the Eye

Professor of molecular, cellular, and biomedical sciences Rick Cote has spent decades researching how vision works at a molecular level. Cote and his interdisciplinary team that includes doctoral and undergraduate students are especially interested in the molecular events that occur during the first steps in vision. Their work lays the groundwork for a better understanding of, and possible treatments for, retinal diseases.

Smokey Winged Beetle Bandit Enlisted in NH’s Emerald Ash Borer Fight

New research indicates that the Smokey Winged Beetle Bandit wasp may be much more effective than standard traps in monitoring the spread of the Emerald Ash Borer in the Granite State. Entomologist Donald Chandler, a UNH zoology professor and New Hampshire Agricultural Experiment Station researcher, oversaw the project, collaborating with Morgan Dube, a UNH graduate student in biological sciences and entomologist with the NH Department of Agriculture, Markets, and Food. The Smokey Winged Beetle Bandit is a natural predator of the Emerald Ash Borer beetle, which has been killing ash trees across the country for over two decades.

http://.colsa.unh.edu/aes/article/waspandeab

The Bees' Needs: Sanborn Sophomores Create Pollinator-friendly Environments

In mid-June, 135 sophomores at Sanborn Regional High School traveled into the woods of Kingston and Newton, NH armed with pick-axes, shovels, and hacksaws. Accompanied by their biology teachers and a team of specialists that included UNH Cooperative Extension’s Emma Carcagno, the students worked to make acres of field and wooded areas made more inviting to bees, monarch butterflies, birds, and other flying and crawling creatures whose actions help pollinate plant life and perpetuate the natural cycles that keep interdependent plant and animal species healthy. The day-long field event was the culmination of their month-long study of the critical role of biodiversity in ecosystems.

http://extension.unh.edu/articles/Bees-Needs

Business & Technology

Institute on Disability Research Director Andrew Houtenville Discusses Disability and Employment on C-SPAN's Washington Journal

Andrew Houtenville, director of the Institute on Disability at UNH, recently appeared on C-SPAN to take part in a discussion of disability and employment. Featured in a segment in the “Washington Journal” program, Houtenville discussed the results of the 2015 Kessler National Employment and Disability Survey, a collaborative study between the Kessler Foundation and UNH.

http://www.iod.unh.edu/about/news/15-06-10/Institute_on_Disability_Research_Director_Andrew_Houtenville_featured_on_C-SPAN.aspx

Mihaela Sabin – STEM Education for All

Based at UNH Manchester, within the state’s largest urban public school district, associate professor of computer science Mihaela Sabin works to create education practices that engage the next generation of young scientists in active problem solving. Her research focuses on the professional development of STEM (science, technology, education, and mathematics) teachers, with the goal of ensuring that educators are prepared to engage with rigorous and relevant curricula to meet the technological demands of the 21st century’s computing workforce.

National Survey Demonstrates That People with Disabilities Are Striving to Work and Overcoming Barriers

The Kessler Foundation National Employment and Disability Survey was released in early June, and among its key findings is that Americans with disabilities are striving to work and are overcoming employment barriers. The survey was commissioned by the Kessler Foundation and conducted by UNH. Its results are expected to influence planning and policymaking in the field of disability employment.

http://www.iod.unh.edu/about/news/15-06-03/National_Survey_Demonstrates_That_People_with_Disabilities_are_Striving_to_Work_and_Overcoming_Bарriers.aspx

http://cola.unh.edu/article/2015/06/announcing-kessler-foundation-employment-survey-results

nTIDE Jobs Report: Americans with Disabilities Continue to Enter the Workforce

The National Trends in Disability Employment - Monthly Update (nTIDE) collaborative report issued in June by the Kessler Foundation and UNH shows that more Americans with and without disabilities have continued to enter the workforce. Today, there are over 400,000 more Americans with disabilities in the workforce than there were a year ago.

http://www.iod.unh.edu/about/news/15-06-05/nTIDE_Jobs_Report_Americans_with_Disabilities_Continue_to_Enter_the_Workforce.aspx

STEM Discovery Lab Celebrates First Class of Design Make Code Program

The Design Make Code Program, a summer and after-school STEM (Science, Technology, Education, and Mathematics) program for school-aged children in Manchester, recently celebrated the completion of the program by its inaugural class of more than 80 students from middle schools across the city. Program participants have learned how to build basic machines, design elementary circuitry, and program small robots. Design Make Code is offered by the UNH STEM Discovery Lab in partnership with the Granite United Way’s B.R.I.N.G. I.T. program, with support from the Bean Foundation. Design Make Code will continue this summer and be available to K-12 students.

http://manchester.unh.edu/blog/unh-stem-discovery-lab/stem-discovery-lab-celebrates-first-class-design-make-code-program

Credit: UNH Manchester
UNH’s Entrepreneurship Center Announces Recipients of First Summer Seed Grant

UNH’s Peter T. Paul Entrepreneurship Center has announced the recipients of its first competitive Summer Seed Grants. The grants will allow four diverse, multidisciplinary student teams to continue during the summer months to develop prototypes and business models for their entrepreneurial ventures. The teams will be provided with opportunities to interact with mentors in the UNH Wildcatalyst Network in addition to receiving support and advice from their UNH faculty and staff advisors.

http://www.unh.edu/news/releases/2015/06/em30seed.cfm

Women as Economic Providers: Dual-Earner Families Thrive as Women’s Earnings Rise

A new brief by Kristin Smith, family demographer at the Carsey School of Public Policy and research associate professor of sociology, shows that although dual-earner families are doing relatively well, single-earner family income has either remained stagnant or decreased in the past decade. According to Smith, who analyzed Current Population Survey data for 2000 and 2013, “American families increasingly rely on women’s earnings for their economic well-being.”

http://campaign.r20.constantcontact.com/render?ca=c369bbba-57e4-44dc-b851-a72de654f82d&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b

http://www.unh.edu/news/releases/2015/06/em30carsey.cfm

http://cola.unh.edu/article/2015/06/unh-research-finds-dual-earner-families-thrive-married-womens-earnings-rise

Engineering & Physical Sciences

Alternative Energy: A Prolific Undergraduate Career Behind Him, a New Engineer Looks Ahead

Mechanical engineering graduate Ian Gagnon ’15 spent his time at UNH preparing for a career in the renewable energy field. Gagnon has built an impressive research resume since he started working as an undergraduate research assistant for associate professor Martin Wosnik in the UNH Center for Ocean Renewable Energy in 2013, culminating in collaborating with other UNH engineering students to create EDEN, a remote monitoring device for water systems. Gagnon and his classmates have founded LiquiNet, a startup alternative energy company that is developing EDEN for use in communities in Africa. Gagnon will stay at UNH, doing research with Wosnik during the summer and then as a graduate student starting in the fall.

http://www.unh.edu/unhtoday/unhtoday/2015/06/alternative-energy

Kevin Short – Math Makes Some Noise

According to Kevin Short, University Professor of applied mathematics, “everything has a layer of math underneath its surface.” As an accomplished researcher, inventor, and entrepreneur, Short speaks from experience. His current research is exploring mathematical approaches to make voice recognition devices (such as those found in hearing aids and cell phones) more effective.

Lightning Strikes Twice

Joseph Dwyer, Peter T. Paul Chair in space sciences within the UNH Institute for the Study of Earth, Oceans, and Space and the College of Engineering and Physical Sciences, has come full circle. Dwyer began his career at the Florida Institute of Technology working in space instrumentation before switching his research focus and ultimately becoming the world expert in the high-energy physics behind lightning strikes. Now at UNH, he uses his experience in both areas to compare the predictions of his mathematical models with data collected by instruments on the Fermi Gamma-Ray Space Telescope and the Reuven Ramaty High Energy Solar Spectroscopic Imager spacecraft; the instruments can measure gamma rays coming from thunderstorms.

http://www.unh.edu/unhtoday/unhtoday/2015/06/lightning-strikes-twice

Health, Behavioral & Social Sciences

Charlie French Co-authors Journal Article on Extension Stakeholder Engagement

UNH Cooperative Extension specialist Charlie French has co-authored an article that appeared in the June 2015 issue of the Journal of Human Sciences and Extension. This special issue of the journal focuses on the Cooperative Extension Program Development Model and how it can be adapted to changing contexts. French teamed with George Morse, professor emeritus, University of Minnesota and Extension faculty associate, University of Maine, to examine extension stakeholder engagement.

http://extension.unh.edu/articles/Charlie-French-Co-authors-Article-Journal

Child and Family Psychotherapy Expert Joins Psychology Faculty at UNH Manchester

Nicholas Mian will join the UNH Manchester faculty this fall as an assistant professor of psychology. Mian comes from the Child Program at the Center for Anxiety and Related Disorders, where he is a Licensed Clinical Psychologist specializing in the areas of child and family psychotherapy. Mian's research has investigated the presentation and developmental course for anxiety symptoms in young children, as well as risk factors for childhood anxiety. He is interested in understanding the needs and help-seeking behaviors of parents in high-risk communities in order to develop strategies to enhance engagement in research-based prevention programs for anxiety disorders.

http://manchester.unh.edu/blog/campus-news/child-and-family-psychotherapy-expert-joins-psychology-faculty

Child Protective Services May Link Families to Needed Income Supports

A new brief published by the Carsey School of Public Policy at UNH examines the incidence of families receiving income support in the time following filing child maltreatment reports. Of caregivers who report they are struggling financially and receiving no services at the time of the child maltreatment report, 40 percent report receiving services eighteen months later, with half then reporting they were no longer struggling financially. The researchers, Wendy Walsh, research assistant professor of sociology at the UNH Crimes Against Children Research Center, and Beth Mattingly, director of research on vulnerable families at the Carsey School, concluded that the time of a child maltreatment report is a critical intervention point to link families to supports such as the provision of basic material services that can help ensure the safety and well-being of children.

http://campaign.r20.constantcontact.com/render?ca=1099876f-902c-4b61-94af-96e066d3a046&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b
Coverage Rates Stabilize for Children's Health Insurance

New research by UNH Carsey School of Public Policy research assistant and doctoral candidate in sociology Michael Staley shows that health insurance coverage rates for children remained stable in 2013 relative to 2012. Although private insurance coverage rates declined in the period, Staley found that public coverage rates increased.

http://campaign.r20.constantcontact.com/render?ca=a5675f67-aaca-498c-8a0b-24fcb8a5779d&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b
http://www.unh.edu/news/releases/2015/06/em09carsey.cfm
http://cola.unh.edu/article/2015/06/sociological-research-finds-coverage-rates-stabilized-children%E2%80%99s-health-insurance

Cyberbullying Less Emotionally Harmful to Kids Than Traditional In-Person Harassment

According to a new study by researchers in the UNH Crimes Against Children Research Center, cyberbullying that starts and stays online is no more harmful than in-person harassment, and may actually be less disturbing. The study’s results, which were published in the American Psychological Association’s journal Psychology of Violence, go against assumptions that many have held about cyberbullying. However, the team found that mixed episodes—those that involved both in-person and technology elements—appear to be the most distressing to youth. Kimberly Mitchell, UNH research associate professor of psychology, led the study which analyzed data from the Technology Harassment Victimization Study, a nationally-represented study funded by the National Institute of Justice.

http://www.unh.edu/news/releases/2015/06/ap03cyberbullying.cfm
http://cola.unh.edu/article/2015/06/cyberbullying-less-emotionally-harmful-kids-person-harassment-study-finds

Director of Health Law and Policy for IHPP Featured on NHPR to Discuss King v. Burwell

In June, Lucy Hodder, director of health law and policy at UNH’s Institute for Health Policy and Practice and professor of law at the UNH School of Law, was featured on the All Things Considered program on New Hampshire Public Radio (NHPR). She discussed the then-upcoming King v. Burwell Supreme Court decision and its potential impact on the State. Hodder is an expert on the implementation of the Affordable Care Act in New Hampshire.

http://chhs.unh.edu/article/2015/06/ihpp-director-health-law-and-policy-ihpp-featured-nhpr-discuss-king-v-burwell

Diversity Growing Because Births Far Exceed Deaths Among Minorities, But Not Among Whites

Kenneth Johnson, senior demographer in the Carsey School of Public Policy at UNH, has published a brief analyzing new Census Bureau estimates that reflect demographic trends. Johnson found that the distinctly different demographic trajectories among whites and minorities are driven by the interaction of several key demographic forces. Natural increase (births to deaths) is the major force behind the growing diversity of the U.S. population, but immigration remains important. He concluded that, although the pace of U.S. population growth is slowing because of the lingering impact of the Great Recession and the aging of the population, the population continues to become more diverse.

http://campaign.r20.constantcontact.com/render?ca=77228e4-305a-4a92-a3d6-7a84cac7ae0c&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b
http://www.unh.edu/releases/2015/06/em25carsey.cfm
Do you “park your car” or “pahk your cah”: Student Research Published in UNH’s Inquiry Journal

The Spring 2015 issue of Inquiry featured research by linguistics major Melanie Platt ’15 that shows a dialect shift among younger generations of Southern New Hampshire residents. She found speakers younger than 60 years old now exhibit fully rhotic (r variable) speech. The shift is related partially to a convergence with the standard rhotic dialect, heard in the larger communities of the younger generations, along with a divergence from the Boston dialect. Inquiry is a journal of multidisciplinary undergraduate research published by UNH.

http://cola.unh.edu/article/2015/06/do-you-%E2%80%9Cpark-your-car%E2%80%9D-or-%E2%80%9Cpahk-your-cah-%E2%80%9D-student-research-published-unhs-inquiry

Education Professor Publishes Book on School Uniform Debate

Rowman & Littlefield has published a new book co-authored by Todd A. DeMitchell, the John and H. Irene Peters Endowed Professor of Education at UNH, exploring the issue of uniform requirements in public schools. The Challenges of Mandating School Uniforms in the Public Schools: Free Speech, Research, and Policy draws upon DeMitchell’s eighteen years of experience in public education as well as his research as a professor of school law and labor relations at UNH. DeMitchell’s co-author is Richard Fossey, the Paul Burdin Endowed Professor of Education at the University of Louisiana at Lafayette.

http://cola.unh.edu/article/2015/06/book-school-uniform

IHPP Meets with Foreign Leaders to Discuss U.S. Affordable Care Act

In June, the Institute for Health Policy and Practice at UNH (IHPP) hosted political and social leaders from thirteen countries for a presentation and discussion of the Affordable Care Act. The visit was organized through the World Affairs Council of NH, which, through a partnership with the U.S. Department of State’s Bureau of Educational and Cultural Affairs, brings current and emerging leaders from various fields to the U.S. for three-week international exchanges. The group hosted by IHPP had health care reform, state government, and civic engagement as its focus.

http://chhs.unh.edu/article/2015/06/ihpp-meets-foreign-leaders-discuss-us-affordable-care-act


UNH’s Institute on Disability (IOD) has released its annual report on scholarly activity and engagement, documenting and summarizing the IOD’s accomplishments and outcomes in FY 2014. The “organizational c.v.” highlights many of the IOD’s innovative and interdisciplinary research, academic, service, and dissemination initiatives.

http://www.iod.unh.edu/About/AnnualReport.aspx
http://www.iod.unh.edu/Research/IOD.CV.aspx

Oral Health Care Access in New Hampshire

A new UNH Carsey School of Public Policy brief provides an overview of the current state of oral health care in New Hampshire. Researchers Eleanor M. Jaffee, Joan Widmer, and Lisa I. Speropolous found that, although New Hampshire succeeds in most measures of oral care health, access to adequate care is still challenging for some residents, particularly low-income families in the sparsely populated northern region of the State.

http://campaign.r20.constantcontact.com/render?ca=2b559498-727f-480f-bdeb-573d6e0bcc6b&c=10e4c220-45a3-11e3-b9d6-d4ae5292c40b&ch=12810d00-45a3-11e3-ba92-d4ae5292c40b
http://chhs.unh.edu/article/2015/06/oral-health-care-access-new-hampshire
Political Science Student Headed to Rwanda on Boren Scholarship
Ross Conroy ’17 has received a Boren Scholarship to study post-genocide peace building in Rwanda. Conroy will spend the spring 2016 semester as part of the Post-Genocide Restoration and Peace Building program run by the School for International Training and also will learn the Kinyarwanda language. Boren awards support undergraduate and graduate students as they acquire language skills and experience in countries critical to the future stability and security of the United States. Conroy, a political science and international affairs dual major, is one of only 171 students nationally to receive a Boren Scholarship for the 2015-2016 academic year.

Post-Conflict Peacebuilding in Bosnia-Herzegovina: Student Research Published in UNH’s Inquiry Journal
Political science and international affairs major Hannah Waller ’15 has published the results of her investigation of peacebuilding efforts in Bosnia-Herzegovina in Inquiry, UNH’s journal for multidisciplinary undergraduate research. Waller traveled to the region during the summer of 2014 with funding from an International Research Opportunities Program grant from the Hamel Center of Undergraduate Research at UNH. Through interviews with residents, she found that establishing one common truth about the events, keeping alive the memory of the conflict, and ensuring justice and accountability for the perpetrators are the most important elements for success in the rebuilding of Bosnia-Herzegovina.

Strong Muscles, Fleet Feet; Exercise Science Professor Summer Cook Helps Older Adults Build Muscles for Independent Living
Summer Cook, assistant professor of kinesiology, focuses on finding alternative methods for building leg strength in older adults—65-plus—who are at risk of losing mobility and thus, independence, because of injury or illness. Her current research project, funded by a grant from the National Institutes of Health, is investigating whether low-load, blood-flow restricted exercise, in which subjects lift very light weights while a cuff much like one used to take blood pressure restricts oxygen to the muscle, will allow people who can’t lift heavy weights to still reap the benefits of strength training exercise. So far, the results are positive, but Cook will continue her research with older adults and women of all ages to establish the viability of this innovative regimen.

Tomorrow, in the Palms of Their Hands: Franklin Visioning Enters Its Most Challenging Stage
Like many towns and cities in New Hampshire, Franklin is struggling to decide how its community will develop amidst economic and social upheaval. Over the past year, UNH Cooperative Extension, Plan NH, and The Citizen’s Institute on Rural Design have linked their respective expertise to help Franklin structure a series of meetings for residents to think, talk, plan, and create in a community-wide visioning process to answer the fundamental questions: Who are we and who will we be? Now, the city finds itself in perhaps the most difficult stage of that process: decision.
UNH Center Committed to Ending Sexual and Relationship Violence is Finalist for National Community Engagement Award

The Association of Public and Land-Grant Universities has chosen the Prevention Interventions Research Center at UNH (PIRC) as one of four regional winners of the W.K. Kellogg Foundation Community Engagement Scholarship Award in recognition of its extraordinary community outreach initiatives in working to end sexual and relationship violence and stalking. As a result, UNH is now a finalist for the Association’s 2015 national C. Peter Magrath Community Engagement Scholarship Award, which will be presented in November. The research and prevention efforts of the PIRC emphasize the importance of using a community and bystander focus while examining the continuum of violence.

http://www.unh.edu/news/releases/2015/06/em10aplu.cfm

UNH Center Releases Sexual Assault Prevention Findings to White House

In June the Prevention Interventions Research Center at UNH released a report prepared for the White House Task Force to Protect Students from Sexual Assault. It’s Not Just the What but the How presents best practices for educating students on sexual misconduct policies, and will inform strategies for the prevention of, and response to, sexual violence on college and university campuses.

http://cola.unh.edu/article/2015/06/unh-center-releases-sexual-assault-prevention-findings-white-house
http://www.unh.edu/news/releases/2015/06/em09prevention.cfm

UNH Expert Weighs In On Duggar Drama

News recently broke that the Duggars, stars of the TLC reality show “19 Kids and Counting,” had been hiding an instance of sexual abuse within their own family. David Finkelhor, director of the Crimes Against Children Research Center, co-director of the Family Research Laboratory, and professor of sociology at UNH, discussed the case and how it illustrates the differences in how juvenile and adult offenders are dealt with by society.

http://cola.unh.edu/article/2015/06/unh-expert-weighs-duggar-drama
http://www.unh.edu/unhtoday/unhtoday/2015/06/unh-expert-weighs-duggar-drama

UNH Health Law Expert Available to Discuss Supreme Court Ruling on the Affordable Care Act

Lucy Hodder, director of the health law and policy program at UNH’s Institute for Health Policy and Practice and professor of law at the UNH School of Law, is available to discuss the U.S. Supreme Court ruling on King v. Burwell. Hodder has dedicated two decades of her career to healthcare and public policy, working in the public, private, and university sectors.

http://www.unh.edu/news/releases/2015/06/em25aca.cfm
**Humanities & the Arts**

**Promoting the Ancient Link between Greece and Southern Italy**
Four UNH faculty members from the Department of Classics, Humanities, and Italian Studies traveled to Sicily in May to take part in the First Interdisciplinary Symposium on the Hellenic Heritage of Southern Italy. Amy Boylan, Piero Garofalo, Harriet Fertik, and Joanna Kenty presented papers describing their scholarship, which spanned material from the 4th century BCE to the 21st century CE. Their presentations formed an entire panel at the conference: “Murder and Mayhem in the Sicilian Landscape.”

http://cola.unh.edu/article/2015/06/promoting-ancient-link-between-greece-and-southern-italy

**SURF Grant Recipient Kelli Minelli Researches Bernard Herrmann**
Music education major Kelli Minelli ’16 has received a UNH Summer Undergraduate Research Fellowship (SURF) to study Bernard Herrmann. Herrmann is best known for scoring such films as *Citizen Kane* and *Psycho*, but Minelli will be focusing on the composer’s largely-ignored opera, *Wuthering Heights*, which Herrmann believed to be his greatest work.

http://cola.unh.edu/article/2015/06/surf-grant-recipient-kelli-minelli-researches-bernard-herrmann

**UNH Furniture Makers Featured in Concord, NH Exhibit**
A new exhibition features pieces by furniture makers who have studied in UNH’s department of art and art history as well as the work of Leah Woods, associate professor of art. The exhibit is sponsored by the New Hampshire Furniture Masters Association as part of its “Schools of Thought” series, and examines the ways in which education at UNH influenced the artists’ work and development. The free exhibition runs through September 7 at the Furniture Masters Gallery at 49 South Main Street in Concord, NH.

http://cola.unh.edu/article/2015/06/unh-furniture-makers

**Marine & Ocean Sciences**

**Green Crabs and Sweatpants: An Intern Goes On Assignment at Jackson Estuarine Lab**
As her first assignment as a summer intern with UNH Cooperative Extension, Hannah Drake ’16, an English/international affairs major, went to the Jackson Estuarine Laboratory to learn about the research UNH Cooperative Extension specialists are conducting with the European green crab, a highly-destructive invasive species that has negatively impacted the local fishing industry. A team led by Gabriela Bradt, marine fisheries specialist for UNH Cooperative Extension and New Hampshire Sea Grant, is looking for patterns in the crabs’ molting process that would provide an indicator for the optimum time, in culinary terms, to harvest the crabs. If successful, the work would enable area chefs to incorporate more green crab into recipes, and thus make the species a more marketable catch for Seacoast fishers.

http://newhampshireinourhands.com/2015/06/23/the-seacoast-gets-crabby/
Marine Science Takes Center Stage in New Puppet Musical

A new collaboration between the UNH Marine Docents and the UNH Department of Theatre and Dance has produced a musical puppet show for middle-school students. With brightly colored, charismatic characters, including numerous fish, a sea star, an octopus, a whale, and even a puppet garbage bag to represent trash in the ocean, *What’s All the ComOcean?* teaches students about the effects of warming ocean temperatures and invasive species on marine creatures, and encourages students to have a positive impact on the ocean. The show will be on tour with the UNH Little Red Wagon group this summer; the Docents will incorporate the show into their in-school marine science programming beginning in the fall 2015.


More Than Mapping: CCOM Lets No Data Lie Fallow

The Center for Coastal and Ocean Mapping/Joint Hydrographic Center (CCOM/JHC) at UNH has developed a well-deserved reputation as a world leader as it has worked to fulfill its original mandate to improve ship navigation safety by mapping the seafloor and making the massive amount of data collected quickly available for chart production. Now, according to director Larry Mayer, CCOM/JHL is turning its attention “to the opportunities provided by this huge flow of information for marine habitat assessments, gas seep detection, fisheries management, disaster mitigation and national security.” One example of this new focus is CCOM/JHL’s support of post-Hurricane Sandy relief activities; the Center is studying the impact of the storm on the seafloor and on marine debris.

http://unh.edu/unhtoday/unhtoday/2015/06/more-mapping

Save the Shrimp: UNH Team Heads to Vietnam to Help Farmers Fight a Deadly Disease

In June, UNH Cooperative Extension/NH Sea Grant aquaculture specialist Michael Chambers and Extension distance education and media technologist Faye Cragin traveled to Vietnam to learn about the shrimp industry in Southeast Asia. They will use what they learned to develop a curriculum and create six interactive, portable web-based training modules that will allow shrimp farmers both in Southeast Asia and beyond to share experiences, learning, and best practices to prevent the spread of Early Mortality Syndrome, a disease that has decimated the billion dollar shrimp industry in the region. The educational tools, which will be created by a team consisting of Chambers, Cragin, and instructional designer Ken Mitchell from the UNH Academic Technology department, are expected to change the way shrimp farming is done not only in Southeast Asia but also in many other parts of the world.

http://www.unh.edu/unhtoday/unhtoday/2015/06/save-shrimp
Space Science

McAuliffe-Shepard Aerospacefest Features UNH-Built Satellite

The 2015 Aerospacefest, held at the McAuliffe-Shepard Discovery Center in Concord, NH on June 13th, featured a new exhibit—a small satellite built in the late 1990s by faculty, staff, and student researchers in the Space Science Center within UNH’s Institute for the Study of Earth, Oceans, and Space. The Cooperative Astrophysics and Technology Satellite (CATSAT) was developed to learn more about the sources of gamma rays, and remains the only satellite ever fully designed and constructed in New Hampshire.

http://www.unh.edu/news/releases/2015/06/ds03catsat.cfm

Sustainability & the Environment

Shoring Up the Shoreline: UNH Project Stabilizes Plum Island’s Dunes

UNH plant ecologist Gregg Moore and UNH Cooperative Extension/NH Sea Grant specialist Alyson Eberhardt recently worked with elementary school students to preserve a dune on Plum Island, the spit of sand along the Atlantic Ocean in the Massachusetts towns of Newbury and Newburyport. Moore and Eberhardt oversaw the 22 fourth graders from Molin Upper Elementary School as they planted American beach grass into the dune to help prevent erosion. This is the first of many UNH-sponsored restoration events funded through a National Wildlife Federation grant that will help increase the resiliency of Great Marsh, a vast ecosystem of marshes, beaches, estuaries, and islands that stretches from New Hampshire south to Cape Ann in Massachusetts.

http://unh.edu/unhtoday/unhtoday/2015/06/shoring-shoreline

The (Grass)roots of the Matter: Barry Rock on Innovation, Outreach, Working Together, and the Resilience of the Forest

Barry Rock, professor emeritus of national resources and the environment, continues to immerse himself in research, teaching, and outreach at UNH. He brings his years of experience in forest health monitoring to a wide range of projects, including a collaboration with archaeologists in Mexico. Rock’s signature legacy, the Forest Watch program, is a unique citizen science initiative that engages primary and secondary school students across New England in the collection and processing of field data relating to air pollution damage in forest stands.

The Winds of (Climate) Change: UNH Experts Weigh in on Pope Francis’s Laudato Si

In June, Pope Francis released *Laudato Si*, an encyclical dedicated to environmental issues and climate change. UNH experts Cameron Wake, climatologist in UNH’s Institute for the Study of Earth, Oceans, and Space, and Larry Hamilton, professor of sociology, discussed the 180-page document and its potential impacts and implications. They expect the pope’s statements to have an impact on the broad perception of climate change, and Wake thinks the pope’s support could have a big impact on the outcome of the United Nations Climate Change Conference to be held in Paris this December at which a significant global agreement on the reduction of greenhouse gas emissions will be considered.

http://cola.unh.edu/article/2015/06/winds-climate-change
http://unh.edu/unhtoday/unhtoday/2015/06/winds-climate-change

True Detectives: The NH Method Sets the Standards for Wetlands Evaluation

A group of volunteers from towns such as Randolph, Bradford, Hampton, and Raymond, and professionals from the New Hampshire Department of Transportation recently headed out to Bear Brook State Park to practice using the NH Method. The NH Method, developed in 1991 and adopted and revised by UNH Cooperative Extension in 2011, is a vital tool to assess the value of wetlands and inform crucial community and state decisions about development and conservation. The NH Method makes it possible for conservation-minded volunteers to assess wetlands, and to be informed advisors, without holding academic or professional credentials. Many scientists and state and local officials have embraced it as well. Although the tool is online and can be learned solo, support from a two-year NH Department of Environmental Services grant (funded by the U.S. Environmental Protection Agency Region 1) has enabled about 80 people to be trained over the past two years through 2-day workshops, in which groups like this spend one day learning in the classroom and one day practicing in the field.

http://extension.unh.edu/articles/True-detectives

UNH Researchers Use Census, Remote-Sensing Data to Investigate Forest Changes

Kenneth Johnson, professor of sociology, and Mark Ducey, professor of forest biometrics and management, are collaborating to understand climate variability in NH. In a project funded by the U.S. Forest Service, Johnson and Ducey will combine demographic and remote sensing data with inventory data from the USDA Forest Service Forest Inventory and Analysis and use statistical models to examine the spatial and temporal association of demographic and housing change with forest characteristics and patterns of forest harvest. Their novel approach will help them accurately estimate carbon sequestration, the long-term storage of carbon in the environment.

http://colsa.unh.edu/aes/article/forestchanges

UNH Scientists, Alumni Recognized for White Mountain National Forest Research

Faculty and graduate student scientists and alumni from UNH were among those recognized recently for their work in helping conserve the White Mountain National Forest through their research to understand soil, site, and vegetation relationships in the White Mountains. Mark Ducey, professor of forest biometrics and management; Tom Lee, associate professor of forest ecology; and Michael Palace, research associate professor of tropical ecology and remote sensing of biometric properties, were among those honored in May with the Two Chief’s Partnership Award. This award is a national honor given annually by the chiefs of the USDA Forest Service and the USDA Natural Resources Conservation Service in recognition of partnership efforts that promote landscape conservation across jurisdictional and resource boundaries.

http://colsa.unh.edu/aes/article/twochiefs