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# LMU LA Center for Urban Resilience March Newsletter



Founded in 2011, CURes is housed in Seaver College, reports to Academic Affairs through the Provost, and offers unique opportunities to members of the broader LMU community. With a staff of eight, plus fellows and postdocs, CURes serves LMU faculty, staff, and students by; developing undergraduate and graduate courses, supporting faculty research and scholarly activity, publishing an international journal and conducting cutting-edge urban ecology research. We collaborate with faculty through fellowships, joint grant making, original research, and outreach programming. We also partner with the Green LMU Initiative, the Campus Sustainability Officer; the School of Education; Loyola Law School; Bellarmine College of Liberal Arts, the School of Film and Television, the Academy of Catholic Thought and Imagination, and others to enhance the ongoing efforts of those programs and to help initiate novel projects that meet the goals of The LMU Strategic Plan.

# 2018 is the Year of the Bird!

National Geographic, the National Audubon Society, Bird Life International, and the Cornell Lab of Ornithology declared 2018 the <u>Year of the Bird</u> to celebrate the 100<sup>th</sup> anniversary of the signing of the Migratory Bird Treaty Act (MBTA). The MBTA protects migratory birds between the US and Canada, making it unlawful to pursue, hunt, take, capture, kill, or sell listed birds. Full protection is also grated to feathers, eggs, and nests. It is the most powerful bird-protection law ever passed.

The MBTA is <u>currently under threat</u> from the Department of the Interior and Congress, led by Rep. Liz Cheney (R-WY). Cheney introduced a measure in November to gut the MBTA as an amendment to H.R. 4239, a bill that would weaken environmental protections. Over 500 nationwide organizations <u>released a statement</u> in early February supporting the MBTA and urging Congress not to pass H.R. 4239, as weakening the MBTA lessens the responsibility and accountability of fossil fuel companies to protect wildlife. If you are interested in engaging with this topic, you may contact your Representative <u>here</u>. Neither CURes nor LMU endorses a specific opinion or course of action.

There are many Los Angeles bird events happening over the next months, and throughout 2018. On April 7<sup>th</sup>, the Friends of Ballona Wetlands will host their Migration Celebration at the Ballona Discovery Park in Playa Vista. The Friends also <u>regularly hold</u> beginner birding walks and educational events open to the public. Bird LA Day is May 12, with a <u>range of events</u> taking place across the city.







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# **CURes Begins Ballona Wetlands Research**

CURes received a grant from the Ballona Wetlands Conservancy to develop a research project to better understand how this unique habitat integrates with urban life in Los Angeles. In the first year of the multi-year project, the CURes staff aims to monitor terrestrial and aquatic biodiversity, water quality, and social dynamics.

Dr. Demian Willette (CURes Research Fellow, LMU Biology) and Sarah Bruce-Eisen (LMU '18) began sampling for mosquito larvae in early February. This work will serve the Conservancy to better understand the mosquito population and guide vector control techniques. They will also determine how vegetative factors, temperature, water flow, and other variables influence mosquito breeding levels. Additionally, Bruce-Eisen will use this work as part of a senior project.

The CURes team will work to create a social assessment of individual and group attitudes and behaviors in regards to the Ballona Wetlands ecosystem. This will aid the Conservancy to better serve resident and visiting populations to Ballona.

Stay tuned for more updates on this project!

# Coyote Research Update

The CURes team began Year 2 of the 3-Year Long Beach coyote assessment management study, to assess and better understand coyote population and behavior dynamics. Field methodologies will continue to include game camera trap data gathering and analysis of both video and picture data, scat collection and analysis, and DNA analysis to determine dietary components. The research team are working to answer questions such as family group dynamics, dietary composition, temporal movement patterns, and individual identification.

Owl pellets are being used to obtain more complete skeletons of prey species, which will then be compared to the bones found in the coyote scat samples. By concurrently conducting genetic analysis through targeted PCR techniques, the team can identify what the coyotes are eating. This portion of the project aims to better understand urban predator diets.

Be sure to visit the LMU Undergraduate Research Symposium on March 24<sup>th</sup> to learn more about this project from CURes' student researchers!

## Friends of Ballona Wetlands Honored

On March 19<sup>th</sup>, the Friends of Ballona Wetlands (FBW) will be honored by Heal The Bay (HTB) as one of their Super Healers. FBW partnered with HTB to prepare for the upcoming Ballona Wetlands restoration, and will continue to do so throughout the process. Both organizations provide ongoing expertise to guide restoration efforts, engage with the public through outreach and education, and conduct scientific analysis of the Wetlands.

Lisa Fimiani (CURes Fellow) served as the Executive Director of FBW for 7 years, laying crucial groundwork for the current restoration initiatives.



Friends of Ballona Wetlands

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# Water Shortages are a Social Justice Issue

The documentary "Beyond the Brink," directed by Jim Thebaut, screened in Bakersfield in late February, shedding light on the water crisis in a new way. The San Joaquin Valley is the primary example of the water crisis used in the film — Bakersfield lies within this region.

Dr. Eric Strauss (CURes Executive Director) was interviewed for the film and featured in this article. According to Dr. Strauss, "If our delivery system and agricultural system fails, food will become phenomenally expensive, and it can bring our economy to its knees." This relates to social justice issues of accessibility to food, particularly fresh, healthy food at a reasonable cost. While farmers may be one of the populations most impacted by rising food production costs, vulnerable urban communities will also be affected by increased food prices.

Given the <u>recent announcement</u> that Cape Town, South Africa is expected to have zero water by July 9<sup>th</sup>, the messages of "Beyond the Brink" are increasingly relevant. While the rationing methods of Cape Town residents pushed back the crisis point, large-scale changes to water systems are needed to holistically prevent a catastrophe. Currently, Cape Town residents are <u>restricted to 25 liters a day</u> – the average American uses 300-375 liters daily. Should Cape Town run out of water, it will be the first major city to do so, becoming a <u>test case</u> for climate change, resident social inequalities, and political dysfunctions. While much of Cape Town's water crisis can be attributed to an ongoing drought resulting in low dam and reservoir levels, the policies that led South Africa to this point go back decades to the African National Congress party's poor management of the national water infrastructure. The Democratic Alliance party that governs Cape Town also refused to formally acknowledge the water crisis until January 2018.

Poorer residents, who historically use less water, will face higher food prices, as farmers are unable to harvest as many crops from their fields. Wealthier communities are upset about, in their view, effectively subsidizing water consumption to less affluent communities, and dislike the possibility of desalinization plants being implemented near tourism areas. These conflicting voices evoke memories of apartheid, adding to the social tensions surrounding the issue.

Cape Town, and other parts of South Africa, are located in a Mediterranean climate zone — as is LA. Therefore, the experiences and current events in Cape Town are important when considering water policies for Southern California. Relating the messages of "Beyond the Brink" and the current water shortages in Cape Town to LA's water conservation efforts could serve as guidelines to policy makers as they determine the future of California's water programs.

A "Beyond the Brink" screening will take place at LMU on April 16<sup>th</sup> at 7pm as part of LMU's Earth Month 2018. Follow CURes on social media and visit our website for updates.



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# Meet CURes' New Research Students!

## Coyote Assessment in Long Beach



DeLisa Madere is a sophomore at LMU from Los Angeles, CA. She is a Biology Major and a Dance Minor. She works with CURes as an independent researcher along with Student Employment Services as an Office Coordinator. She has a love for animals as well as a passion for helping others and hopes to combine both of these aspects in a future career.



Grace Riggs grew up on Vashon Island, Washington and is currently a freshman Biology major on the pre-med track. In addition to working for CURes, she also works as a tech in the Life Sciences stockroom and plays the French horn for a chamber ensemble in the music department.



Matt Sheridan grew up in Saratoga, California before coming to Los Angeles to attend LMU. He is a junior Biology major and he is interested in attending medical school after receiving his B.S. degree. Matt is an independent research student for CURes and an executive board member of Sigma Phi Epsilon fraternity.

## **Hummingbird Torpor**



David Ramirez is a freshman Biology major from Bellflower, CA. On campus, he is involved in the Resident Hall Association as Vice President for Rosecrans and saxophonist for the university choir. David is interested in being part of research to improve the outcome of the future for animals around the world. He wants to be involved as soon as possible because time is of the essence, and research experience is one step forward to a better tomorrow. He plans to become a zoologist and conduct independent research, as well as being a conservationist.



Kaitlyn Yee is a senior biology major and has been part of the hummingbird research here at CURes since October 2016. Always interested in plants and animals, she plans to share her interest through teaching biology at the secondary level in schools in her home state of Hawaii. While she is graduating in May, she will continue research, hopefully bringing active research into the classes she will one day teach.

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#### **New Work Study Students**



Arturo Jacobo is from San Diego, CA, and is a sophomore majoring in Urban Studies with a minor in International Relations. After LMU, he plans on attending law school!



Rebecca Davenport is a freshman at LMU from Caldwell, New Jersey. She is studying Biology and Environmental Science, with a focus in Wildlife Conservation. She hopes that her research at CURes will further her experience and interest in animal conservation.



Liam Chamberlin is a first-year undergraduate student at LMU. He is a Screenwriting major with potential minors in English and Environmental Studies. Liam grew up in rural northeastern Washington, just outside

the town of Republic. He has joined CURes in order to contribute to environmental action and restorative justice on the LMU campus, in the greater Los Angeles area, and around the world.

#### Summer Research with CURes!

Want to do research with CURes this summer? We are looking for students to assist with our projects! We will be primarily working on our coyote assessment (game camera monitoring, scat analysis, social surveys) in Long Beach, as well as social surveys in the Ballona Wetlands.

Students can get involved through work study or <u>SURP</u> – a six week program that runs through the end of June. Students will be expected to do a mixture of field work, data collection and analysis, lab work, and social surveys. Flexibility with schedules and duties is a must.

Interested? Contact CURes@lmu.edu.

## **Education Corner**

CURes has forged a new partnership with the LEAH (Leaders through Education, Action, and Hope) Program in Boston, MA. This education initiative is funded by an EPA grant, with a goal of providing quality urban ecology education for the LEAH after-school programs in several cities in Boston. Lessons will be created and then piloted this summer, and then finalized and rolled out officially to all program students in the Fall of 2018. The program also entails the implementation of pre and post-tests, to continually assess the quality of the program. Learn more here.

## Gottliebs Receive LMU Award

Dan and Susan Gottlieb received an Excellence in Community Award from LMU's Office for Research and Sponsored Projects on Wednesday, February 21st.

The Gottliebs are passionate supporters of urban wildlife and native gardens, which led to their sponsorship of Lisa Fimiani (CURes) as the



inaugural Dan and Susan Gottlieb Environmental Leadership Fellow. Through their generosity, Lisa conducts bird walks, creates programs and performs environmental outreach while maintaining and installing native and edible gardens. In addition, the Gottliebs support CURes research of native gardens and hummingbirds.

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# **CURes Prepares for Earth Month 2018**

During the month of April, CURes will be hosting and co-sponsoring several events to bring awareness about a range of environmental issues. We are excited to partner with organizations on and off campus to promote Earth Month 2018. Through our research projects, educational initiatives, restorative justice programs, and outreach, CURes works to serve the greater Los Angeles community with environmental initiatives focused on resiliency. To promote our interdisciplinary techniques of finding solutions to urban ecological problems, we are proud to offer a range of programs during Earth Month 2018. We hope that these events will spark solution-based conversations that continue throughout 2018 and beyond.



#### **Events**

- 4/4: 2017-18 Environmental Lecture Series
  - Mona Seymour (UREV Faculty)
  - "Veganic Agriculture in the United States"
  - 4:30-6:00pm, LMU University Hall 1000
- 4/7: Friends of Ballona Wetlands Migration Celebration
  - Live hawks and owls, art gallery, live music, gardening workshop, food trucks
  - 10am-2pm, Ballona Discovery Park
- 4/13: Mark Wainwright Guest Lecture
  - Children's Eternal Rainforest, Costa Rica
  - 2pm, LMU Periera Hall 140
- 4/14-4/15: Theodore Payne Garden Tour
- 4/16: Beyond the Brink Screening
  - Climate change and the drought in SoCal
  - Featuring CURes' Dr. Eric Strauss
  - LMU Mayer Theater
- 4/17: Mark Wainwright Student Lecture
  - 8am, Pereira Hall 140
- 4/19: Third Thursday
  - Info table and community partners
  - 11am-2pm, LMU Alumni Mall
- 4/20: LA Business Council's 2018 Sustainability Summit
  - CURes is a cooperating organization
  - Register here
- 4/28: Friends of Ballona Wetlands Earth Day Event
  - 9:30am-12pm
- 5/12: Bird LA Day

# **Upcoming Events**

- 3/10: Ballona Freshwater Marsh Survey led by Lisa Fimiani (CURes Fellow) 7am
- 3/10-3/17: Snowy Plover Surveying volunteer opportunity
- 3/23-3/24: LMU Undergraduate Research Symposium

# Never Miss an Update!

Sign up for our weekly blog post announcements by emailing <a href="CURes@lmu.edu">CURes@lmu.edu</a> for more information and to get on our list!

