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New Photo Exhibition Capturing Rare Plants Research Debuts at Calif. Islands Symposium

The 8th California Islands Symposium takes place from Oct. 23-26, and features island habitat, sea otter, seabird and marine ecology research by WERC biologists, including [Kathryn McEachern](#), [Julie Yee](#), [Kevin Lafferty](#), [Tim Tinker](#), [Brian Hatfield](#), [Rob Klinger](#) and [Josh Adams](#). An art exhibition also will premiere at the conference on Oct. 25. A collaboration with McEachern, Channel Islands National Park and other partners, “Balancing Act” was created by photojournalism students at the Brooks Institute, who accompanied McEachern to photograph the life history stages and habitats of many rare plants on the Channel Islands. The exhibition will remain at the Ventura Beach Marriott through January 7, 2013, and will then be available to tour.

<http://www.werc.usgs.gov/Event.aspx?ID=128>

<http://www.werc.usgs.gov/Event.aspx?ID=129>

<http://extension.brooks.edu/visions-gallery-balancing-act/>

NEW JOURNAL ARTICLES

Soulard, CE, [TC Esque](#), D Bedford, S Bond. **The role of fire on soil mounds and surface roughness in the Mojave Desert.** *Earth Surface Processes and Landforms*.

doi: 10.1002/esp.3264

<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4814>

Sedinger, JS, [MP Herzog](#). 2012. **Harvest and dynamics of duck populations.** *Journal of Wildlife Management* 76(6): 1108-1116. doi: 10.1002/jwmg.370

<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4819>

Ruell, EW, SPD Riley, MR Douglas, MF Antolin, JP Pollinger, [JA Tracey](#), [LM Lyren](#), [EE Boydston](#), [RN Fisher](#), KR Crooks. 2012. **Urban habitat fragmentation and genetic population structure of bobcats in coastal southern California.** *American Midland Naturalist* 168: 265-280. doi: 10.1674/0003-0031-168.2.265

<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4822>

EVENTS

October 11, 2012 (Solvang, CA)

[Jon Keeley](#) presented a public lecture on the ecology of fire in Mediterranean ecosystems, hosted by the **Santa Ynez Natural Historical Society**.

<http://www.werc.usgs.gov/Event.aspx?ID=132>

October 13-17, 2012 (Portland, OR)

WERC scientists were well-represented at the **The Wildlife Society 2012 Annual Conference**, with [Arriana Brand](#), [Rob Klinger](#), [Dustin Wood](#), [Joe Fleskes](#), [Vivian Thuy-Vy Bui](#), [Mike Casazza](#), [Glenn Wylie](#), [Diego Johnson](#) and [Chris Lowrey](#) giving talks and posters on topics from black rail habitat to greater sage-grouse ecology.

<http://www.werc.usgs.gov/Event.aspx?ID=86>

October 16-18, 2012 (Sacramento, CA)

USGS Director [Marcia McNutt](#) was a plenary speaker at the **7th Biennial Bay-Delta Conference**, which featured talks by many WERC scientists on South Bay salt pond restoration, sea level rise and San Francisco Bay ecology.

<http://www.werc.usgs.gov/Event.aspx?ID=126>

October 20-25, 2012 (Tampa, FL)

[Laura Valoppi](#) presented talks at the **National Conference on Coastal and Estuarine Habitat Restoration**, discussing studies related to the South Bay Salt Pond Restoration Project and structured decision making case studies.

<http://www.werc.usgs.gov/Event.aspx?ID=111>

October 21, 2012 (Santa Cruz, CA)

[Josh Adams](#) was the featured speaker at this month’s **Science Sunday at the Seymour Center at Long Marine Lab**. Adams spoke on the lives of seabirds in Monterey Bay and across the Pacific.

<http://www.werc.usgs.gov/Event.aspx?ID=133>

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NEW JOURNAL ARTICLES (CONT'D)

Mordecai, EA, KP Paaijmans, LR Johnson, C Balzer, T Ben-Horin, E Moor, A McNally, S Pawar, SJ Ryan, TC Smith, **KD Lafferty**. 2012. **Optimal temperature for malaria transmission is dramatically lower than previously predicted.** *Ecology Letters*. doi: 10.1111/ele.12015
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4823>

Madej, MA, J Seney, **P van Mantgem**. 2012. **Effects of road decommissioning on carbon stocks, losses, and emissions in north coastal California.** *Restoration Ecology*. doi: 10.1111/j.1526-100X.2012.00911.x
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4792>

LeBlanc, AM, **KK Drake**, KL Williams, MG Frick, T Wibbels, DC Rostal. 2012. **Nest temperatures and hatchling sex ratios from loggerhead turtle nests incubated under natural field conditions in Georgia, United States.** *Chelonian Conservation and Biology* 11(1): 108-116. doi: 10.2744/CCB-0915.1
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4816>

Kolden, CA, JA Lutz, CH Key, JT Kane, **JW van Wagtenonk**. 2012. **Mapped versus actual burned area within wildfire perimeters: characterizing the unburned.** *Forest Ecology and Management* 286: 38-47. doi: 10.1016/j.foreco.2012.08.020
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4797>

Kim, SL, **MT Tinker**, JA Estes, PL Koch. 2012. **Ontogenetic and among-individual variation in foraging strategies of northeast Pacific white sharks based on stable isotope analysis.** *PLoS ONE* 7(9): e45068. doi: 10.1371/journal.pone.0045068
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4789>

Kane, VR, JA Lutz, **SL Roberts**, DF Smith, RJ McGaughy, NA Povak, **ML Brooks**. 2013. **Landscape-scale effects of fire severity on mixed-conifer and red fir forest structure in Yosemite National Park.** *Forest Ecology and Management* 287: 17-31. doi: 10.1016/j.foreco.2012.08.044
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4824>

Jacobson, ER, **KH Berry**. 2012. **Pathogenesis of *Mycoplasma testudineum* in free-ranging desert tortoises, *Gopherus agassizii*.** *Journal of Wildlife Diseases* 48(4): 1063-1068. doi: 10.7589/2011-09-256
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4808>

Hill, NJ, **JY Takekawa**, **JT Ackerman**, KA Hobson, G Herring, CJ Cardona, JA Runstadler, WM Boyce. 2012. **Migration strategy affects avian influenza dynamics in mallards (*Anas platyrhynchos*).** *Molecular Biology*. doi: 10.1111/j.1365-294X.2012.05735.x
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4784>



New IUCN Assessments for Fiji Iguana Species

Robert Fisher has coauthored new assessments for three species of *Brachylophus* iguanas — all endemic to islands of Fiji and all categorized by the IUCN Red List as endangered. Fisher was part of the team that described *Brachylophus bulabula*, as part of his research focus on Pacific Islands native and invasive reptile species.

<http://www.iucnredlist.org/details/174471/0>

<http://www.iucnredlist.org/details/19243030/0>

<http://www.iucnredlist.org/details/2965/0>

EVENTS (CONT'D)

October 22-25, 2012 (Lima, Peru)
Nate Stephenson attended a conference on Andean forests. Stephenson was asked to speak on his 30 years of experience in forest monitoring efforts in California's Sierra Nevada, and insights on climate and environmental change.
<http://www.werc.usgs.gov/Event.aspx?ID=134>

October 30, 2012 (Sacramento, CA)
Karen Thorne will talk about her research on forecasting the impact of sea level rise on Pacific Coast salt marsh habitats at the final session of the **CSU Sacramento Fall Ecology Colloquium** public lectures.
<http://www.werc.usgs.gov/Event.aspx?ID=120>

November 5, 2012 (Sacramento, CA)
The **California Landscape Conservation Cooperative** will host the **DFG Climate College** today. This workshop for resource professional includes a lecture by **Tom Suchanek** on the projected impacts of climate change to the Bay Area.
<http://www.werc.usgs.gov/Event.aspx?ID=135>

November 3-8, 2012 (Ridgecrest, CA)
Kristin Berry will lecture at all three sessions offered for the **Introduction to Desert Tortoise Surveying, Monitoring and Handling Techniques**, a workshop series for wildlife professionals hosted by the Desert Tortoise Council.
<http://www.werc.usgs.gov/Event.aspx?ID=130>

November 13, 2012 (webinar)
Phil van Mantgem will present the online lecture "**For Whom the Bell Tolls: Patterns, Processes and Consequences of Fire-Caused Tree Mortality**" for the California Fire Science Consortium.
<http://www.werc.usgs.gov/Event.aspx?ID=127>

IN THE NEWS

Bobcats, Beavers Among Wildlife Captured on Camera at Point Reyes National Seashore (KQED; *Marin Independent Journal*)

Wildlife monitoring by **Gary Fellers** was featured in pieces by Laird Harrison and Mark Prado. Fellers' remote cameras helped park managers assess the response of mammal species to past wildfires.
<http://blogs.kqed.org/newsfix/2012/10/08/watch-hidden-camera-videos-of-point-reyes-wildlife/>
http://www.marinij.com/ci_21724295

NEW JOURNAL ARTICLES (CONT'D)

Bryant, M, J Reynolds, **LA DeFalco**, **TC Esque**. 2012. **Short seed longevity, variable germination conditions, and infrequent establishment events provide a narrow window for *Yucca brevifolia* (Agavaceae) recruitment.** *American Journal of Botany*. doi: 10.3732/ajb.1200099
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4825>

NEW TECHNICAL REPORTS

Ackerman, JT, MP Herzog, L Salas, T Gardali, G Ballard, D Loughman, G Yarris, JM Eadie. 2011. **Avian breeding demographic response to climate change: a multi-species and multi-landscape approach to synthesizing risk factors.** Summary Report, U.S. Geological Survey, Western Ecological Research Center, Davis, CA; PRBO Conservation Science, Petaluma, CA; California Waterfowl Association, Sacramento, CA; University of California, Davis, CA. 133p
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4791>

NEW WERC PUBLICATION BRIEFS

Long-Term Data Clarifies Desert Tortoise Growth, Maturity and Survivorship Parameters

Long-term mark-release-recapture studies provide the best means of obtaining the most accurate information on life history characteristics such as growth, age at maturity, and survivorship. A study by **Phil Medica**, **Ken Nussear**, **Todd Esque** and Mary Saethre in the *Journal of Herpetology* reports on the growth, age at sexual maturity and survivorship of a cohort of 17 known-age, semi-wild desert tortoises over a 47 year period. The results differ from previous estimates of desert tortoise survival.
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=4776>



Ben Young Landis/USGS

USGS Ecology Returns to Family Science Fair at AT&T Park

The World Series is not the only game in town. WERC scientists will give the San Francisco Giants some company on Saturday, November 3, 2012, when AT&T Park will host the **2012 Bay Area Science Festival**. In only its second year, the festival's **Discovery Days at AT&T Park** event turns the stadium promenade and field into a free, open-air carnival for the public, with educational activities and booths hosted by Bay Area museums, universities and other science engineering offices and corporations. This year, WERC will have a jointly hosted booth with the **Monterey Bay Aquarium** on sea otter science; a booth from **Pete Coates** and **Roger Hothem** on nesting birds of Alcatraz Island; as well as a jointly hosted booth with the **South Bay Salt Pond Restoration Project**.
<http://www.bayareascience.org/festival/discovery-days-at-att-park/>

IN THE NEWS (CONT'D)

Can Native Frogs Be Restored to the San Gabriel Watershed?

(*WatershedWise* magazine)

The Council for Watershed Health's special issue on the biota of California's San Gabriel watershed includes an article led by **Adam Backlin** and **Elizabeth Gallegos** explaining native frog species and the threats they face.
http://watershedhealth.org/Files/document/782_WatershedWise_V14-3_web.pdf

Great White Sharks Have Varied Menu, Study Says (*Santa Cruz Sentinel*)

Reporter Paul Gabrielson reports on a new study coauthored by **James Estes** and **Tim Tinker** that used stable isotopes to analyze the diet habits of white sharks over the course of their lifetime.
http://www.santacruzsentinel.com/santacruz/ci_21675173s

Restoring Coastal Wetlands Adds Value to Silicon Valley (*DOI Newswave*)

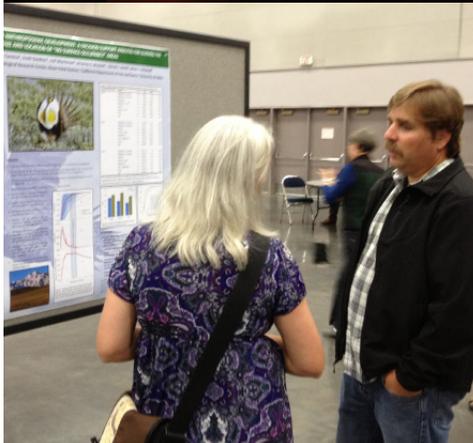
A feature article in the Interior newsletter on coastal and ocean issues discusses the **South Bay Salt Pond Restoration Project** and the economic and environmental benefits of this habitat management effort, and quotes Interior Assistant Secretary Anne Castle.
<http://www.doi.gov/pmb/ocean/news/newswave/upload/NewsWave-Fall-2012-7.pdf>

EPA Awards \$6.5 Million for Ten Projects to Restore San Francisco Bay Water Quality and Habitats (*EPA*)

The US EPA announced new grants directed to studying water quality in the San Francisco Bay watershed, including projects informing the **South Bay Salt Pond Restoration Project**.
<http://yosemite.epa.gov/opa/advpress.nsf/0/82C31B3E568B570585257A9A0058ED1C>

Research to Track Otters' Response to Seismic Surveys (*SLO Tribune*)

Reporter David Sneed reports on inter-agency research led by **Tim Tinker** to study southern sea otter health along the San Luis Obispo coast. The study will add new information about sea otters in this part of the range, as well as provide data to inform federal management decisions if proposed seismic testing takes place.
<http://www.sanluisobispo.com/2012/10/20/2268771/sea-otters-earthquake-tests.html>

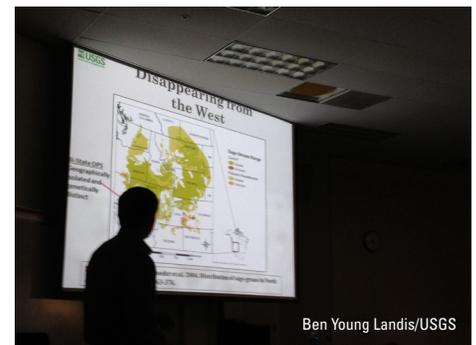


NEW BLOGPOSTS

Sac State Ecology Colloquium Connects Students with USGS Researchers

USGS is wrapping up a successful first launch with **California State University, Sacramento** to provide students and faculty with an USGS ecology lecture series. The Fall 2012 Ecology Colloquium is the brainchild of campus department chairs and USGS offices sited on campus, and seeks to strengthen opportunities and partnerships for Sac State students and faculty and USGS researchers.

<http://www.werc.usgs.gov/outreach.aspx?RecordID=156>



Ben Young Landis/USGS

New Study: Mallard Migrations Bring Bird Flu Strains to California

Migrating ducks play an important part in the transmission and mixing of new avian influenza strains in their northern California wintering grounds, according to a new study coauthored by **Nichola Hill, John Takekawa and Josh Ackerman**. “This study confirms that mallards bring viral strains from their northern breeding grounds to California,” says Hill. “While resident mallards appear to be serving as reservoirs for virus that likely persists year-round.”

<http://www.werc.usgs.gov/outreach.aspx?RecordID=157>

<http://blogs.ucdavis.edu/egghead/2012/10/09/migrating-mallards-carry-bird-flu-strains-to-california/>



USFWS

USGS Ecosystems Mission Celebrates The Wildlife Society's 75th Anniversary

You could say that the U.S. Geological Survey is about more than just rocks. When wildlife scientists, managers and students gathered in Portland, Oregon, this October for **The Wildlife Society's 2012 Conference**, they found a conference program with close to 60 presentations, 5 symposia and at least 26 posters featuring a USGS contributor or mentor. USGS continued its support of wildlife professionals, including TWS Native Students Professional Development Program, and commemorated the 75th birthday of The Wildlife Society with a featured blogpost:

http://www.usgs.gov/blogs/features/usgs_pick/usgs-and-wildlife-research-looking-forward/