



## EVENTS

**December 15-19, 2014 (San Francisco)**  
**Josh Ackerman** and **Jeff Tracey** had research presented at the **American Geophysical Union Fall Meeting**.  
<http://www.werc.usgs.gov/Event.aspx?ID=199>

**December 16, 2014 (Webinar)**  
 A webinar hosted by the **Southern Regional Extension Forestry** and **USDA NRCS** profiled conservation planning in the Intermountain West, applying research by **Joe Fleskes** to optimize pastureland management for migrating waterfowl.  
<http://www.conservationwebinars.net/webinars/meeting-the-needs-of-spring-migrating-waterfowl-in-the-intermountain-west-on-working-ranches>

**January 23, 2015 (Los Angeles)**  
**Erin Boydston** and **Robert Fisher** have been invited to attend the **Greater Los Angeles Biodiversity Workshop** by the Natural History Museum of Los Angeles County and The Nature Conservancy.  
<http://www.werc.usgs.gov/Event.aspx?ID=202>

**January 26-30, 2015 (Santa Rosa, CA)**  
 Wetland restoration design studies by **Lacy Smith** and acoustic monitoring of California amphibians by **Patrick Kleeman** are part of the scheduled program for the **2015 Annual Meeting of The Wildlife Society's Western Section**.  
<http://www.werc.usgs.gov/Event.aspx?ID=201>

**January 27-30, 2015 (Frascati, Italy)**  
**Nathan Stephenson** has been invited to speak at the **European Space Agency's** first-ever **BIOMASS Science Workshop** in Italy. "Improving Understanding of Environmental Controls of Forest Biomass and Productivity: Insights from Permanent Plot Networks" will be the talk's title.  
<http://www.werc.usgs.gov/Event.aspx?ID=203>

## Department of Interior Announces Funding for Climate Change Adaptation Studies

Secretary of the Interior Sally Jewell announced this month that the Climate Science Centers and the USGS National Climate Change and Wildlife Science Center are awarding nearly \$6 million to support 50 new research projects that better prepare communities for impacts of climate change. Two USGS Western Ecological Research Center projects are among the funded studies: **Phil van Mantgem's** work explaining how exactly droughts are affecting wildfire-related tree deaths in the American West, and **Karen Thorne's** work establishing a Pacific Coast research network to understand how changing storms and tides are affecting coastal plants and animals.  
<http://www.doi.gov/news/pressreleases/interior-department-announces-funding-for-climate-change-studies.cfm>  
<http://www.usgs.gov/newsroom/article.asp?ID=4085>

## NEW JOURNAL ARTICLES

Syphard, AD, **TJ Brennan**, **JE Keeley**. 2014. **The role of defensible space for residential structure protection during wildfires**. *International Journal of Wildland Fire*. doi: 10.1071/WF13158  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5138>

Stewart, NA, B Konar, **MT Tinker**. 2014. **Testing the nutritional-limitation, predator-avoidance, and storm-avoidance hypotheses for restricted sea otter habitat use in the Aleutian Islands, Alaska**. *Oecologia*. doi: 10.1007/s00442-014-3149-6  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5135>

Penman, TD, L Collins, AD Syphard, **JE Keeley**, RA Bradstock. 2014. **Influence of fuels, weather and the built environment on the exposure of property to wildfire**. *PLOS ONE* 9(10): e111414. doi: 10.1371/journal.pone.0111414  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5136>

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## NEW JOURNAL ARTICLES (CONT'D)

Fujii, JA, K Ralls, **MT Tinker**. 2014. **Ecological drivers of variation in tool-use frequency across sea otter populations.** *Behavioral Ecology*. doi: 10.1093/beheco/aru220  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5142>

Collins, BM, **A Das**, JJ Battles, D Fry, KD Krasnow, SL Stephens. 2014. **Beyond reducing fire hazard: fuel treatment impacts on overstory tree survival.** *Ecological Applications* 24(8): 1879-1886. doi: 10.1890/14-0971.1  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5133>

## NEW WERC PUBLICATION BRIEFS

### The Built Environment Is More Influential Than Fuel Breaks in Exposure to Wind-Driven Chaparral Fire

Analysis of San Diego County wildfires by **Jon Keeley** and colleagues published in *PLOS ONE* suggest that weather determines the risk of exposure for assets in the landscape. Under extreme weather, where the risk of fire is greatest, landscape fuel treatments are unlikely to have a significant influence on risk.  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5137>

### How Much Defensible Space is Needed to Reduce Home Losses in Chaparral?

An *International Journal of Wildland Fire* paper by **Jon Keeley** and **Tess Brennan** found that in San Diego County, defensible space increased the likelihood of structure survival during wildfire. However, the distance required was never more than 30m (100 ft), even on steep slopes, and was most effective between 5-20 m (16-58 ft) from the home. Also, treatments were effective when as much as 60% of cover remained.  
<http://www.werc.usgs.gov/ProductDetails.aspx?ID=5139>

## IN THE NEWS

**Working Wet Meadows Initiative (Intermountain West Joint Venture)**  
In a November newsletter, the IWJV highlighted the Oregon SONEC Working Wet Meadows Initiative. The effort uses data from **Joe Fleskes** to understand the roles of private lands in sustaining waterfowls migrating through the Southern Oregon-Northeastern California flyway.  
<http://iwjv.org/working-wet-meadows-initiative>

**Insight Best of 2014: Science and Discovery (Capital Public Radio)**  
The Sacramento NPR affiliate included its interview with **Kevin Lafferty** on sea star wasting disease as part of the “Best of 2014: Science and Discovery” list for its morning news show, *Insight*.  
<http://www.capradio.org/news/insight/2014/12/29/insight-122914/>

**14 Eye-Opening USGS Images from 2014**  
Refresh your science trivia knowledge with this list of fun facts and gorgeous visuals from the 2014 year of USGS research.  
<http://on.doi.gov/13QSGG0>



## Not Just for Kissing: The Science of Mistletoes, Birds, and Bees

They parasitize trees and may have even gotten some holiday cheer planted on your face this winter season, but the mistletoe is actually quite a fascinating organism. And for well over a decade, plant ecologist **Todd Esque** has made annual edits to a USGS science story about the ecology of this intriguing group plants, updating new facts and answering classic trivia about these surprising diverse flowering plants. Read the 2014 update to our mistletoe story here:  
[http://www.usgs.gov/blogs/features/usgs\\_top\\_story/not-just-for-kissing-mistletoe-and-birds-bees-and-other-beasts/](http://www.usgs.gov/blogs/features/usgs_top_story/not-just-for-kissing-mistletoe-and-birds-bees-and-other-beasts/)



## Gary Fellers Receives Park Service Resource Research Award

On December 19, National Park Service Director Jonathan Jarvis announced the 2013 Natural Resource Stewardship Awards. Chosen from peer-nominated regional winners, these national awards honor career contributions to park science and management. The 2013 Natural Resource Research Award goes to USGS Western Ecological Research Center researcher emeritus **Gary Fellers**, for his years of advising Point Reyes National Seashore and monitoring Sierra amphibians and bats. Previous winners of this award include **Nathan Stephenson** and noted naturalist E.O. Wilson.  
<http://www.nps.gov/news/release.htm?id=1664>