

# California-Nevada Amphibian Populations Task Force

January 11-12, 2018

The Ridge Golf Course and Events Center  
2020 Golf Course Road  
Auburn, CA 95602

## AGENDA

- Chair:** Dave Bradford, Las Vegas, NV
- Meeting Coordinator:** Jef Jaeger, School of Life Sciences, University of Nevada, Las Vegas
- Local Organizers:** Lisa Achter, Dudek & Associates, Auburn, CA  
Maria Cisneros, Plumas National Forest, Oroville, CA  
Tina Mark, Tahoe National Forest, Nevada City, CA  
Craig Seltenrich, Dudek & Associates, Auburn, CA
- Registration Support:** Amphibian and Reptile Conservancy

### Wednesday, January 10, 2018

- 6:30-9:00 pm **No Host Meet-and-Greet** at Moonraker Brewing Co., 12970 Earhart Ave #100, Auburn, CA 95602

### Thursday, January 11, 2018

- 7:45-8:30 am **Registration and Refreshments**
- 8:30-8:45 am **Introduction and Announcements:** Dave Bradford

#### Session 1

Moderator: Sarah Kupferberg, University of California, Berkeley

- 8:45-9:10 am **Southern California's Mountain Yellow-legged Frog (*Rana muscosa*): Status, Research, and Conservation Activities.** Adam R. Backlin\*, Elizabeth A. Gallegos, and Robert N. Fisher. US Geological Survey, Western Ecological Research Center, San Diego, CA, abacklin@usgs.gov (25 min).
- 9:10-9:35 am **Occurrence of California Red-legged Frogs (*Rana draytonii*) and Northern Red-legged Frogs (*R. aurora*) in Timberlands of Mendocino County, California, Examined with Environmental DNA.** Brian H. Halstead<sup>1</sup>, Patrick M. Kleeman<sup>2\*</sup>, Caren S. Goldberg<sup>3</sup>, Mallory Bedwell<sup>3</sup>, Robert B. Douglas<sup>4</sup>, and David W. Ulrich<sup>5</sup>. <sup>1</sup>U.S. Geological Survey, Western Ecological Research Center, Dixon, CA, bhalstead@usgs.gov; <sup>2</sup>U.S. Geological Survey, Western Ecological Research Center, Point Reyes Station, CA; <sup>3</sup>School of the Environment, Washington State University, Pullman,

WA; <sup>4</sup>Mendocino Redwood Company, LLC, Fort Bragg, CA; <sup>5</sup>Mendocino Redwood Company, LLC, Ukiah, CA (25 min).

- 9:35-10:00 am **An Improved Camera Trap for Amphibians, Reptiles, Small Mammals, and Large Invertebrates.** Michael T. Hobbs<sup>1\*</sup> and Cheryl S. Brehme<sup>2</sup>. <sup>1</sup>Wildlife Ecologist, Technologist, San Jose, CA, mhobbs2928@gmail.com; <sup>2</sup>Western Ecological Research Center, U.S. Geological Survey, San Diego, CA (25 min).
- 10:00-10:35 am **Break** (35 min)
- 10:35-11:00 am **Using Environmental DNA to Detect Amphibians – A Case Study in Southern California.** Emily A. Wilson<sup>1\*</sup>, Renwei Chen<sup>2</sup>, Cheryl J. Briggs<sup>2</sup>, Tom L. Dudley<sup>1</sup>, and Edward L. Ervin<sup>3</sup>. <sup>1</sup>Marine Science Institute, UCSB, Santa Barbara, CA ewilson@lifesci.ucsb.edu; <sup>2</sup>Ecology Evolution & Marine Biology, UCSB, Santa Barbara, CA; <sup>3</sup>Merkel & Associates, Inc., San Diego, CA (25 min).
- 11:00-11:25 am **Preliminary Findings on the Age Determination of the Coastal Tailed Frog (*Ascaphus truei*) in the Trinity Alps Wilderness, California.** Adrian D. Macedo<sup>1,2\*</sup>, Justin M. Garwood<sup>2</sup>, John O. Reiss<sup>1</sup>, and Justin A. Demianew<sup>2,3</sup>. <sup>1</sup>Department of Biological Sciences, Humboldt State University, Arcata CA, adm566@humboldt; <sup>2</sup>California Department of Fish and Wildlife, Arcata CA; <sup>3</sup>Department of Wildlife, Humboldt State University, Arcata CA (25 min).
- 11:25-11:50 am **Dammed Rivers: Genetic Signatures of Altered Flow Regimes in a River Breeding Frog (*Rana boylei*).** Ryan A. Peek<sup>1\*</sup>, and Michael R. Miller<sup>2</sup>. <sup>1</sup>Graduate Group in Ecology & Center for Watershed Sciences, University of California, Davis, CA ryan.a.peek@gmail.com; <sup>2</sup>Department of Animal Science, University of California, Davis, CA (25 min).
- 11:50 – 1:20 **Lunch** (90 min)

## Session 2

Moderator: Danny Boiano, Sequoia and Kings Canyon National Parks, CA

- 1:20-1:45 pm **Comparison of California Tiger Salamander Breeding Pool Types and Preserve Viability in Sonoma County.** David G. Cook<sup>1\*</sup>, David L. Stokes<sup>2</sup>, and Julian Meisler<sup>3</sup>. <sup>1</sup>Sonoma County Water Agency, Santa Rosa, CA, dcook@scwa.ca.gov; <sup>2</sup>University of Washington Bothell, Interdisciplinary Arts and Sciences, Bothell, WA; <sup>3</sup>Santa Rosa, CA (25 min).
- 1:45-2:10 pm **Effects of Drought on an Ephemeral Water Breeding Amphibian, the Yosemite Toad.** Cathy Brown<sup>1\*</sup>, Katie Wilkinson<sup>1</sup>, Lucas Wilkinson<sup>1</sup>, Stephanie Barnes<sup>2</sup>, Carolyn Hunsaker<sup>3</sup>, and Marc Mazerolle<sup>4</sup>. <sup>1</sup>USDA Forest Service, Sonora, CA, cathybrown@fs.fed.us; <sup>2</sup>USDA Forest Service, Prather, CA; <sup>3</sup>PSW Research Station, Fresno, CA; <sup>4</sup>Universite Laval, Quebec, Canada (25 min).
- 2:10-2:35 pm **Drivers of Survival and Recruitment in Translocated Populations of the Endangered Mountain Yellow-Legged Frog.** Roland A. Knapp<sup>1\*</sup>, and Maxwell B. Joseph<sup>2</sup>. <sup>1</sup>Sierra Nevada Aquatic Research Laboratory, University of California, Mammoth Lakes, CA, roland.knapp@ucsb.edu; <sup>2</sup>Earth Lab, University of Colorado, Boulder, CO (25 min).

- 2:35-3:00 pm **Foothill Yellow-legged Frog (*Rana boylei*) Growth, Longevity, and Population Dynamics from a 9-Year Photographic Capture-Recapture Study.** Koen G. H. Breedveld\*, and Maria J. Ellis. Spring Rivers Ecological Sciences, Cassel, CA, koen@springrivers.com (25 min).
- 3:00-3:30 pm **Break** (30 min)
- 3:30-3:55 pm **Managing Invasive Crayfish to Restore Stream Habitat in the Malibu Creek Watershed, Los Angeles Co., USA.** Angela De Palma-Dow\*, Joseph Curti, and Debra Sharpton. Mountains Restoration Trust, Calabasas, CA. adepalmadow@mountainstrust.org (25 min).
- 3:55-4:20 pm ***In Situ* Population Enhancement of an At-Risk Population of Foothill Yellow-Legged Frogs, *Rana boylei*, in the North Fork Feather River, Butte County, California.** Colin P. Dillingham<sup>1\*</sup>, Christopher W. Koppl<sup>1</sup>, Joseph E. Drennan<sup>2</sup>, Sarah J. Kupferberg<sup>3</sup>, Amy J. Lind<sup>1</sup>, Courtney S. Silver<sup>4</sup>, Tina V. Hopkins<sup>1</sup>, Kevin D. Wiseman<sup>2</sup>, and Karla R. Marlow<sup>2</sup>. <sup>1</sup>Plumas National Forest, Quincy, CA, cdillingham@fs.fed.us; <sup>2</sup>Garcia and Associates, San Francisco, CA; <sup>3</sup>University of California, Berkeley, CA; <sup>4</sup>California State University, Chico, CA (25 min).
- 4:20-4:45 pm **An Update on the Center for Biological Diversity's Work to Protect Amphibians in California and Nevada.** Jenny Loda, Center for Biological Diversity, Oakland, CA jloda@biologicaldiversity.org (25 min).
- 4:45-4:50 pm **Announcements and Adjourn**

## BANQUET

at

The Ridge Golf Course and Events Center  
(same meeting room)

Dinner is included with registration. A no-host bar will be available.

- 6:30-7:00 pm **Guests Arrive**
- 7:00-9:30 pm **Dinner and Presentation:**

### **Relict Leopard Frog: A Story of Confusion, Loss, Rediscovery and Conservation**

by

**Jef R. Jaeger**

Assistant Professor in Residence  
School of Life Sciences  
University of Nevada, Las Vegas

## **Friday, January 12, 2018**

7:45-8:30 am **Registration and Refreshments**

8:30-8:35 am **Announcements:** Dave Bradford

### **Session 3**

Moderator: Ryan Peek, Graduate Group in Ecology & Center for Watershed Sciences, University of California, Davis

8:35-9:00 am **How Can We Make Meadow Restoration Work for California's Mountain Frogs?** Karen Pope<sup>1\*</sup>, Jonah Piovia-Scott<sup>2</sup>, Adam Cummings<sup>1</sup>, and Sarah Yarnell<sup>3</sup>. <sup>1</sup>USDA Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab, Arcata, CA, kpope@fs.fed.us; <sup>2</sup>Washington State University, Vancouver, WA; <sup>3</sup>UC Davis, Center for Watershed Sciences, Davis, CA (25 min).

9:00-9:20 am **Cascades Frogs in Northern California: Threats, Priorities, and Opportunities.** Kimberly Cook<sup>1\*</sup>, Bennett Hardy<sup>2</sup>, Karen Pope<sup>3</sup>, and Jonah Piovia-Scott<sup>1</sup>. <sup>1</sup>Washington State University, Vancouver, WA, kimberly.j.cook@wsu.edu; <sup>2</sup>University of Wisconsin-Milwaukee, Milwaukee, WI; <sup>3</sup>USDA Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab, Arcata, CA (20 min).

9:20-9:40 am **Update on Restoration of Endangered Mountain Yellow-legged Frogs in Sequoia and Kings Canyon National Parks.** Daniel M. Boiano, National Park Service, Sequoia and Kings Canyon National Parks, Three Rivers, CA danny\_boiano@nps.gov (20 min).

9:40-9:55 am **Ranaviruses Infect Mountain Yellow-legged Frogs (*Rana muscosa* and *Rana sierrae*).** Thomas C. Smith<sup>1\*</sup>, Angela M. Picco<sup>2</sup>, and Roland Knapp<sup>3</sup>. <sup>1</sup>Marine Science Institute, University of California, Santa Barbara, Santa Barbara, CA, t.collier.smith@gmail.com; <sup>2</sup>Pacific Southwest Regional Office, U.S. Fish and Wildlife Service, Sacramento, CA; <sup>3</sup>Sierra Nevada Aquatic Research Laboratory, Mammoth Lakes, CA (15 min).

9:55-10:25 am **Break** (30 min)

10:25-10:50 am **Relict Leopard Frog Susceptibility to Chytridiomycosis Varies by Collection Site.** Anthony W. Waddle<sup>\*</sup>, Ghazal Rezaei, Nikhil Pattni, Joshua E. Levy, Yesenia Vasquez, Rebeca Rivera, Frank van Breukelen, and Jef R. Jaeger. School of Life Sciences, University of Nevada, Las Vegas, waddlea3@unlv.nevada.edu (25 min).

10:50-11:15 am **Amphibian Update for California Red-Legged Frog, Yosemite Toad, Sierra Nevada Yellow-legged Frog, and American Bullfrog in Yosemite National Park.** Rob L. Grasso, Molly M. Thompson, Colleen Kamoroff<sup>\*</sup>, Ninette E. Daniele, and Austin Boardman<sup>\*</sup>. Resources Management and Science Division, Yosemite National Park, El Portal, CA, Rob\_Grasso@nps.gov (25 min).

11:15-11:40 am **A Case for Drawing Down Fishless Ponds: Interactions Between California Red-legged Frogs (*Rana draytonii*) and Two Species of Newt (*Taricha torosa* and *T. granulosa*) at a Coastal Breeding Site.** Michael F. Westphal<sup>1\*</sup>, Karen M. Kiemnec-Tyburczy<sup>2</sup>, Eva Gruber<sup>1</sup>, Maxwell F. Westphal<sup>3</sup>, and Christopher J. Lortie<sup>4</sup>. <sup>1</sup>US Bureau of Land Management, Central Coast Field Office, Marina, CA, mwestpha@blm.gov;

<sup>2</sup>Department of Biological Sciences, Humboldt State University, Arcata, CA; <sup>3</sup>Hollister, CA; <sup>4</sup>National Center for Ecological Analysis and Synthesis, University of California Santa Barbara, Santa Barbara, CA (25 min).

11:40-11:55 am **Announcements, Discussion of Future Meeting Venues, and Closing Remarks.** Dave Bradford.

### **Friday Field Trip (Optional)**

1:30-5:45 pm **Field Trip to Chicago Park Powerhouse (Bear River Bypass Reach) and Sleephollo Creek.** Led by Craig Seltenrich, Dudek & Associates, Auburn, CA.

Depart from The Ridge Golf Course and Events Center at 1:30 pm by car pool and return by about 5:45 pm. See flyer at meeting for information. Sign up at the registration desk.

### **Saturday Field Trip, January 13, 2018 (Optional)**

8:30 am-12:30 **Field Trip to North Fork American River on Pennyweight Trail.** Led by Ryan Peek, Graduate Group in Ecology & Center for Watershed Sciences, University of California, Davis.

Depart from the Holiday Inn Auburn at 8:30 am by car pool and return by about 12:30 pm. See flyer at meeting for information. Sign up at the registration desk.

## **POSTERS**

### **All Day, Thursday and Friday**

**Human Traffic and Habitat Complexity are Strong Predictors for the Distribution of a Declining Amphibian.** Rachel Anderson. University of California, Davis, Davis, CA, rachel.betts.anderson@gmail.com.

**Understanding the Detection of Environmental DNA from Yellow-legged Frogs to Develop a Recommended Sampling Protocol.** Mallory E. Bedwell and Caren S. Goldberg\*. School of the Environment, Washington State University, Pullman, WA, caren.goldberg@wsu.edu.

**Integrating Environmental DNA Sampling into Long-term Monitoring Strategies: A Case Study for Detecting *Rana sierrae* in Streams.** Holly M. Burger<sup>1</sup>, Christina Buck<sup>1</sup>, Erik De Silva<sup>1</sup>, Mallory Bedwell<sup>2</sup>, Caren S. Goldberg<sup>2</sup>, and Andie Herman<sup>3</sup>. <sup>1</sup>Stillwater Sciences, Berkeley, CA; <sup>2</sup>School of the Environment, Washington State University, Pullman, WA; <sup>3</sup>Pacific Gas & Electric, San Ramon, CA.

**Predation by Gartersnakes (*Thamnophis elegans*) on Translocated and Reintroduced Mountain Yellow-legged Frog Populations (*Rana muscosa* and *Rana sierrae*).** Thomas C. Smith<sup>1\*</sup>, Brian Halstead<sup>2</sup>, and Roland Knapp<sup>3</sup>. <sup>1</sup>Marine Science Institute, University of California, Santa Barbara, Santa Barbara, CA, t.collier.smith@gmail.com; <sup>2</sup>U.S. Geological Survey, Western Ecological Research Center, Dixon Field Station, Dixon, CA; <sup>3</sup>Sierra Nevada Aquatic Research Laboratory, Mammoth Lakes, CA.

\* Indicates presenter in multi-authored talks or posters