

California-Nevada Amphibian Populations Task Force

January 12-13, 2017

Santa Barbara Zoo
Discovery Pavillion
500 Ninos Drive
Santa Barbara, California 93103

AGENDA

- Chair:** Dave Bradford. Las Vegas, NV
- Meeting Coordinator:** Jef Jaeger. School of Life Sciences, University of Nevada, Las Vegas
- Local Organizers:** Kelly Garner. Santa Barbara Zoo
Estelle Sandhaus. Santa Barbara Zoo
Lacey Morgan. Santa Barbara Zoo
- Meeting Sponsor:** Santa Barbara Zoo. Santa Barbara, CA
- Registration Support:** Amphibian and Reptile Conservancy

Wednesday, January 11, 2017

6:30-9:00 pm **No Host Meet-and-Greet:** The Neighborhood Bar & Grill, 235 W. Montecito St.,
Santa Barbara, CA 93101

Thursday, January 12, 2017

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

8:30-8:40 am **Introduction and Announcements.** Dave Bradford

8:40-8:45 am **Welcome to Santa Barbara Zoo.** Estelle Sandhaus

8:45-9:30 am **Featured Presentation:**

**Against the Odds: Recovering Endangered Mountain
Yellow-legged Frogs in the Sierra Nevada**

Roland A. Knapp

Sierra Nevada Aquatic Research Laboratory
Mammoth Lakes, CA

Session 1

Moderator: Dave Bradford. Las Vegas, NV

9:30-9:55 am **An Update on the Center for Biological Diversity's Work to Protect Amphibians in California and Nevada.** Jenny Loda. Center for Biological Diversity, San Francisco, CA; jloda@biologicaldiversity.org (25 min).

9:55-10:30 am **Break** (35 min)

10:30-10:55 am **Long-term Occupancy Monitoring of the Endangered Arroyo Toad: Findings, Feedback Loop to Management, and Implications of Climate Change.** Tritia Matsuda*, Cheryl S. Brehme, and Robert N. Fisher. U. S. Geological Survey, San Diego Field Station, San Diego, CA; cbrehme@usgs.gov (25 min).

10:55-11:20 am **The Rise and Fall of *Rana draytonii* in Little Panoche Valley.** Michael F. Westphal. US Bureau of Land Management, Central Coast Field Office, Marina, CA; mwestpha@blm.gov (25 min).

11:20-11:45 am **Statewide Assessment of Road Related Risks to Reptile and Amphibian Species.** Cheryl S. Brehme* and Robert N. Fisher. Western Ecological Research Center, U.S. Geological Survey, San Diego, CA; cbrehme@usgs.gov (25 min).

11:45-12:10 am **Amphibian Update for California Red-legged Frog, Yosemite Toad, and Sierra Nevada Yellow-legged Frog in Yosemite National Park.** Rob L. Grasso*, Molly M. Thompson, and Ninette R. Daniele. Resources Management and Science Division, Yosemite National Park, El Portal, CA; rob_grasso@nps.gov (25 min).

12:10-1:40 pm **Lunch** (90 min)

Session 2

Moderator: Patrick Kleeman. U.S. Geological Survey, Western Ecological Research Center, Point Reyes Field Station, Point Reyes, CA.

1:40-2:05 pm **Attempting to Recover Endangered Mountain Yellow-legged Frogs in a *Bd*-Naïve Landscape – Everything but the Kitchen Sink?** Daniel M. Boiano* and Isaac C.

Chellman. National Park Service, Sequoia and Kings Canyon National Parks, Three Rivers, CA; danny_boiano@nps.gov (25 min).

- 2:05-2:30 pm **California Red-legged Frog Use of Anthropogenic and Natural Refugia During Late Summer Dry Conditions.** Ken Mierzwa. GHD Inc., Eureka, CA; ken.mierzwa@ghd.com (25 min).
- 2:30-2:55 pm **Using Pond Hydroperiod to Attenuate the Spread of Invasive Tiger Salamander Alleles.** Robert D. Cooper^{1*}, Michael F. Westphal², and H. Bradley Shaffer¹.
¹Department of Ecology and Evolutionary Biology, University of California, Los Angeles, CA; ²U.S. Bureau of Land Management, Hollister Field Office, Hollister, CA; rdcooper408@ucla.edu (25 min).
- 2:55-3:25 pm **Break** (30 min)
- 3:25-3:50 pm **California Department of Fish and Wildlife: Drought Response Actions and Updates.** Laura C. Patterson. California Department of Fish and Wildlife, Sacramento, CA; laura.patterson@wildlife.ca.gov (25 min).
- 3:50-4:15 pm **Genetic Structure of the California Giant Salamander (*Dicamptodon ensatus*) Based on mtDNA and Nuclear Loci.** Brian R. Lavin,* B. Callahan, R. Connell, and Derek J. Girman. Department of Biology, Sonoma State University, Rohnert Park, CA; lavin@seawolf.sonoma.edu (25 min).
- 4:15-4:40 pm **Historical Rise in Fungal Pathogen Prevalence Coincides with Rapid Southern California Extirpation of *Rana boylei*.** Andrea J. Adams^{1*}, Allan P. Pessier², and Cheryl J. Briggs¹. ¹Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, CA; ²Department of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, Pullman, WA; andreajoyadams@gmail.com (25 min).
- 4:40-4:45 pm **Announcements**

POSTERS

All Day, Thursday and Friday

Effects of Bullfrog (*Lithobates catesbeianus*) Removal on Arroyo Toad (*Anaxyrus californicus*) from Remote Training Site Warner Springs. Denise R. Clark and Robert N. Fisher. Western Ecological Research Center, US Geological Survey, San Diego, CA; drclark@usgs.gov.

BANQUET

at the

Santa Barbara Zoo, Discovery Pavillion

(same place as meeting room)

500 Ninos Drive

Santa Barbara, California 93103

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:**

Herping with the Taliban in Afghanistan

by

Theodore J. Papenfuss

Museum of Vertebrate Zoology

University of California

Berkeley, California

Friday, January 13, 2017

- 7:45-8:30 am **Registration and Refreshments**
- 8:30-8:40 am **Announcements.** Dave Bradford
- 8:40-9:30 am **Featured Presentation:**

Success and Failure with Endangered Amphibian Species

Samuel S. Sweet

Department of Ecology, Evolution and Marine Biology
University of California Santa Barbara
Santa Barbara, CA

Session 3

Moderator: Andrea Adams. Department of Ecology, Evolution, and Marine Biology,
University of California, Santa Barbara, CA.

- 9:30-9:55 am **Restoring the Western Pond Turtle (*Emys marmorata*) to Yosemite Valley.** Ninette R. Daniele*, Molly M. Thompson, and Rob L. Grasso. Resources Management and Science Division, Yosemite National Park, El Portal, CA; ninette_daniele@nps.gov (25 min).
- 9:55-10:30 am **Break** (35 min)
- 10:30-10:55 am **Stream-breeding Amphibians of The Geysers Region of Sonoma and Lake Counties: A Summary of 19 Years of Aquatic Monitoring.** Brian T. Pittman^{1*} and Mike Podlech². ¹Environmental Science Associates, Petaluma, CA; ²Mike Podlech, Independent Aquatic Ecologist, Santa Cruz, CA; bpittman@esassoc.com (25 min).
- 10:55-11:20 am **Application of New Genomic Sequencing Methods to Assess Effects of River Regulation on Population Structure and Diversity in a Hydrologically Sensitive Species (*Rana boylei*).** Ryan A. Peek^{1*} and Michael R. Miller². ¹Graduate Group in Ecology & Center for Watershed Sciences, University of California, Davis, CA; ²Department of Animal Science, University of California, Davis, CA; rapeek@ucdavis.edu (25 min).
- 11:20-11:45 am **Field Anti-fungal Treatments Conducted during Bd-caused Mass Mortality Events Dramatically Increase Frog Survival and the Likelihood of Population Persistence.** *Authors:* Roland A. Knapp^{1*} and Thomas C. Smith². ¹Sierra Nevada Aquatic Research Laboratory, Mammoth Lakes, CA; ²Marine Science Institute, University of California, Santa Barbara, CA; knapp@lifesci.ucsb.edu (25 min).
- 11:45-12:05 pm **Population Dynamics of the Santa Barbara County Distinct Population Segment of the California Tiger Salamander, *Ambystoma californiense*.** Erin M. Toffelmier* and H. Bradley Shaffer. Department of Ecology and Evolutionary Biology, University of California, Los Angeles, Los Angeles, CA; etoff@ucla.edu (20 min).

12:05-1:35 pm **Lunch** (90 min)

Session 4

Moderator: Laura Patterson. California Department of Fish and Wildlife, Sacramento, CA.

1:35-2:00 pm **Adopting Molecular Techniques for Yellow-legged Frog (*Rana muscosa* and *R. sierrae*) Restoration and Management.** Colleen Kamoroff^{ab*} and Caren S. Goldberg^a. ^aSchool of the Environment, Washington State University, Pullman, WA; ^bDivision of Natural Resources and Science, Yosemite National Park, El Portal, CA; colleen_kamoroff@nps.gov (25 min).

2:00-2:25 pm **Assessing the Impact of Illegal Pesticide Use on National Forest Headwater Stream Communities.** Karen Pope* and Adam K. Cummings. US Forest Service Pacific Southwest Research Station, Arcata, CA; kpoppe@fs.fed.us (25 min).

2:25-2:50 pm **Landscape Genomics of California Tiger Salamander and Foothill Yellow-Legged Frog: You Really Do Get More from Genomics.** H. Bradley Shaffer* and Evan McCartney-Melstad. Department of Ecology and Evolutionary Biology, and La Kretz Center for California Conservation Science, UCLA, Los Angeles, CA; brad.shaffer@ucla.edu (25 min).

2:50-3:15 pm **Spatial Genetic Structure and Environmental Niche Modeling Identify Two Conservation Units for the Western Spadefoot (*Spea hammondi*).** Kevin M. Neal* and H. Bradley Shaffer. Department of Ecology and Evolutionary Biology, and La Kretz Center for California Conservation Science, Institute of the Environment and Sustainability, University of California, Los Angeles, CA; kevinmneal@gmail.com (25 min).

3:15-3:40 pm **Break** (25 min)

3:40-4:05 pm **Western Spadefoot: Monitoring and Management in Carnegie State Vehicle Recreation Area.** Tara deSilva. California Department of Parks and Recreation, Tracy, CA; tara.desilva@parks.ca.gov (25 min).

4:05-4:30 pm **Investigation of Beaver Dams as Tools for Protecting Amphibians from Climate Change and Introduced Trout at High Elevations.** John M. Romansic^{1*}, Deanna H. Olson², and Jimmy D. Taylor³. ¹Department of Integrative Biology, Oregon State University, Corvallis, OR; ²US Forest Service, Pacific Northwest Research Station, Corvallis, OR; ³US Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, National Wildlife Research Center, Oregon Field Station, Corvallis, OR; jmromansic@gmail.com (25 min).

4:30-4:55 pm **Long-term Success of Experimental Assisted Migration of the Western Spadefoot (*Spea hammondi*) in Southern California During Drought.** Robert N. Fisher^{1*}, Katherine L. Baumberger², Adam R. Backlin², Chris W. Brown¹, and Elizabeth A. Gallegos². ¹San Diego Field Station – San Diego Office, USGS Western Ecological

Research Center, San Diego, CA; ²San Diego Field Station – Santa Ana Office, USGS
Western Ecological Research Center, Santa Ana, CA; rfisher@usgs.gov (25 min).

4:55-5:05 pm **Announcements, Discussion of Future Meeting Venues, and Closing Remarks.** Dave Bradford.

Saturday, January 14, 2017

8:30-1:00 pm **Field Trip to Arroyo Hondo Preserve**

Field trip will be led by Sam Sweet and Chris Evelyn, UCSB. See separate flyer for information. Sign up at the meeting.

* Indicates presenter for multi-authored talks or posters