

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. US 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, US 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. US 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, rdcooper408@ucla.edu; ²US Bureau of Land Management, Hollister Field Office, Hollister, CA (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, andreajoyadams@gmail.com; ²Department of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, Pullman, WA (25 min).
- 4:40-4:45 pm **Announcements**

POSTERS

Thursday and Friday

- All Day **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

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, bpittman@esassoc.com; ²Mike Podlech, Independent Aquatic Ecologist, Santa Cruz, CA (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 and Center for Watershed Sciences, University of California, Davis, CA, rapeek@ucdavis.edu; ²Department of Animal Science, University of California, Davis, CA (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, knapp@lifesci.ucsb.edu; ²Marine Science Institute, University of California, Santa Barbara, CA (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, 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^{1,2*} and Caren S. Goldberg¹.
¹School of the Environment, Washington State University, Pullman, WA, colleen_kamoroff@nps.gov; ²Division of Natural Resources and Science, Yosemite National Park, El Portal, CA (25 min).

2:00-2:25 pm **Assessing the Impact of Illegal Pesticide Use on National Forest Headwater Stream Communities.** Karen Pope^{1*}, Adam Cummings¹, Mourad Gabriel², and Greta Wengert². ¹US Forest Service Pacific Southwest Research Station, Arcata, CA, kpope@fs.fed.us; ²Integral Ecology Research Center, Blue Lake, CA (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, University of California, 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 **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, jmromansic@gmail.com; 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 (25 min).

4:05-4:30 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, US Geological Survey, Western Ecological Research Center, San Diego, CA, rfisher@usgs.gov; ²San Diego Field Station – Santa Ana Office, US Geological Survey, Western Ecological Research Center, Santa Ana, CA (25 min).

4:30-4:45 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, UC Santa Barbara. See separate flyer for information. Sign up at the meeting.

* Indicates presenter for multi-authored talks or posters