

**Declining Amphibian Populations Task Force  
California-Nevada Working Group  
January 13-14, 2005**

**University of California, Berkeley  
2050 Valley Life Sciences Building**

**AGENDA**

Chair: David Bradford, US EPA.

Local Committee: Cherie Briggs, Vance Vredenburg, Lara Rachowicz, UC Berkeley

Sponsor: California Biodiversity Center (Mary Power, Director; <http://cbc.berkeley.edu/>)

**Thursday, January 13, 2004**

8:45-10:00 am **Room open.**

10:00-10:10 am **Introduction and Announcements.** David Bradford, Landscape Ecology Branch, US Environmental Protection Agency, Las Vegas, NV

**KEYNOTE ADDRESS**

10:10-10:55 am **Amphibian Declines: a 15-year Retrospective. Where Are We Heading?** David B. Wake, Department of Integrative Biology and Museum of Vertebrate Zoology, University of California, Berkeley, CA.

**VARIOUS TAXA AND TOPICS**

10:55-11:15 am **Malformations and Parasite Infection: An Emerging Problem in Amphibian Conservation.** Pieter Johnson, Center for Limnology, University of Wisconsin, Madison, WI. (20 min)

11:15-11:30 am **Creating Pond Habitat for Columbia Spotted Frogs in the Reese River Drainage, Central Nevada.** Chad Mellison<sup>1\*</sup> and Jim Harvey.<sup>2</sup> <sup>1</sup>US Fish and Wildlife Service, Reno, NV; <sup>2</sup>US Forest Service. (15 min)

11:30-11:50 am **Complementary Resource Use and Migration Potential of the Cascades Frog (*Rana cascadae*): a Case Study in the Trinity Alps Wilderness, California.** Justin Garwood, Redwood Sciences Laboratory, US Forest Service, and Humboldt State University, Arcata, CA. (20 min)

11:50-12:00 pm **Amphibian Conservation Strategies for 5 Sierra Nevada Frog Species.** Cathy Brown<sup>1\*</sup> and Diane Macfarlane.<sup>2</sup> <sup>1</sup>PSW Research Station, US Forest Service, Berkeley, CA; <sup>2</sup>Threatened, Endangered, and Sensitive Species Program, US Forest Service, Vallejo, CA. (10 min)

12:00-1:30 pm **Lunch**

Moderator: Cherie Briggs, Department of Integrative Biology, University of California, Berkeley, CA

1:30-1:50 pm **Projected Effects of Upland Habitat Loss on California Tiger Salamander Populations - Lessons for Conservation Planning.** Peter Trenham, Davis, CA. (20 min)

1:50-2:05 pm **Implications of the Discovery of *Rana yavapaiensis* in the Western Grand Canyon to the Conservation Strategy for *Rana onca*.** Jef Jaeger,<sup>1\*</sup> David Bradford,<sup>2</sup> Charles Drost,<sup>3</sup> and Lisa Gelczis.<sup>3</sup> <sup>1</sup>Department of Biological Sciences, University of Nevada Las Vegas, NV; <sup>2</sup>Landscape Ecology Branch, US Environmental Protection Agency, Las Vegas, NV; <sup>3</sup>Southwest Biological Science Center, US Geological Survey, Flagstaff, AZ. (15 min)

2:05-2:20 pm **The Response of Amargosa Toad Populations to Habitat Change at Selected Sites.** Brian Hobbs, Nevada Department of Wildlife, Las Vegas, NV. (15 min)

2:20-2:40 pm **Life History of Post-metamorphic Tailed Frogs in North Coastal California.** Laura Burkholder<sup>1\*</sup> and Lowell Diller.<sup>2</sup> <sup>1</sup>Humboldt State University, Arcata, CA; <sup>2</sup>Green Diamond Resource Company, Korb, CA. (20 min)

2:40-3:00 pm **The Relationship of Cold-water Tributaries to Landscape-scale Attributes in a Northern California Watershed: Implications for the Conservation of Cold-water Adapted Amphibians.** Hart Welsh<sup>\*</sup> and Garth Hodgson. Redwood Sciences Laboratory, US Forest Service, Arcata, CA. (20 min)

3:00-3:45 pm **Break**

Moderator: Vance Vredenburg, Department of Integrative Biology, University of California, Berkeley, CA

#### **VARIOUS TAXA AND TOPICS (cont'd.)**

3:45-4:00 pm **Calaveras Frogs Are Making a 'Celebrated' Comeback.** Robert Stack,<sup>1</sup> Mark Jennings,<sup>2\*</sup> and Marc Hayes.<sup>3</sup> <sup>1</sup>Jumping Frog Research Institute, Angels Camp, CA; <sup>2</sup>Rana Resources, Davis, CA; <sup>3</sup>Washington Department of Fish and Wildlife. (15 min.)

#### **LEGAL ISSUES**

4:00-4:20 pm **2004 Year in Review: Legal and Policy Developments Affecting Amphibians in California & Nevada.** Deanna Spooner, Pacific Rivers Council, Eugene, OR. (20 min)

## HIGH MOUNTAIN LAKE PROJECTS – CALIF. DEPT. FISH & GAME

- 4:20-4:35 pm     **High Mountain Lakes Database.** Mitch Lockhart, California Department of Fish & Game, Bishop, CA. (15 min)
- 4:35-4:50 pm     **Management of Native Fauna and Introduced Fisheries in Sierra Nevada Lakes.** Curtis Milliron, California Department of Fish & Game, Bishop, CA. (15 min)
- 4:50-5:05 pm     **High Mountain Lake *Rana muscosa* Habitat Restoration.** Phillip Kiddoo, California Department of Fish & Game, Bishop, CA. (15 min)
- 5:05-5:20 pm     **General Discussion.** Above speakers plus Dawne Becker, California Department of Fish & Game, Bishop, CA. (15 min)

## POSTERS

- All Day,  
Thurs-Fri     **Balancing the Operations and Maintenance Requirements of the State Water Project with the Habitat Needs of the Federally Threatened California Red-legged Frog.** Jennifer Hogan, California Department of Water Resources, Sacramento, CA.
- All Day,  
Thurs-Fri     **Antipredator Response and Palatability of Yosemite Toad Larvae to Nonnative Brook Trout in the Sierra Nevada Mountains of California.** Robert Grasso,<sup>1\*</sup> Ronald Coleman,<sup>1</sup> and Carlos Davidson.<sup>2</sup> <sup>1</sup>California State University, Sacramento, Department of Biological Sciences, Sacramento, CA; <sup>2</sup>California State University, Sacramento, Department of Environmental Studies, Sacramento, CA.
- All Day,  
Thurs-Fri     **Mountain Yellow-legged Frog (*Rana muscosa*) Habitat Restoration in the Gable Lakes Basin.** Rick Ziegler, California Department of Fish and Game.
- All Day,  
Thurs-Fri     **www.AmphibiaWeb.org: An Information System for Amphibian Conservation Biology.** Rebecca A. Doubledee, Tate Tunstall, Vance T. Vredenburg, Joyce Gross, Meridith J. Mahoney, Arie Van der Meijen, and David Wake. Museum of Vertebrate Zoology, Dept. of Integrative Biology, and Dept. of Computer Science (JG), University of California, Berkeley.
- All Day,  
Thurs-Fri     **Amphibian Conservation Through Integrated Data Management: the ARMI (Amphibian Research and Monitoring Initiative) Model.** Chris W. Brown,<sup>1</sup> Jang Byun,<sup>2</sup> Alisa Gallant,<sup>3</sup> Carlton J. Rochester,<sup>1</sup> Stacie A. Hathaway,<sup>1</sup> and Robert N. Fisher.<sup>1</sup> <sup>1</sup>US Geological Survey, Western Ecological Research Center, San Diego, CA; <sup>2</sup>US Geological Survey, Patuxent Wildlife Research Center, Laurel, MD; <sup>3</sup>US Geological Survey, EROS Data Center, Sioux Falls, SD.

**Friday, January 14, 2005**

7:30-8:30 am **Room open.**

8:30-8:35 am **Introduction.** David Bradford, Landscape Ecology Branch, US Environmental Protection Agency, Las Vegas, NV.

**KEYNOTE ADDRESS**

8:35-9:20 am **From Silent Spring to Silent Night: Pesticides and What Our Canary Is Trying to Tell Us.** Tyrone Hayes, Department of Integrative Biology, University of California, Berkeley, CA.

***RANA BOYLII AND R. MUSCOSA***

9:20-9:40 am **Status, Decline, and Phylogeography of *Rana boylei*: Implications for Conservation of Frogs and Rivers.** Amy Lind,<sup>1\*</sup> Carlos Davidson,<sup>2</sup> A. Borisenko,<sup>3</sup> Brad Shaffer,<sup>4</sup> and Gary Fellers.<sup>5</sup> <sup>1</sup>Sierra Nevada Research Center, US Forest Service, Sacramento, CA; <sup>2</sup>Dept. of Environmental Studies, California State University, Sacramento, CA; <sup>3</sup>Oregon Department of Environmental Quality, Portland, OR; <sup>4</sup>Section of Evolution and Ecology, University of California, Davis, CA; <sup>5</sup>Biological Resources Division, US Geological Survey, Point Reyes, CA. (20 min)

9:40-10:00 am **Mating System and Strategy of the Foothill Yellow-legged Frog (*Rana boylei*).** Clara Wheeler, Redwood Sciences Laboratory, US Forest Service, Arcata, CA. (20 min.)

10:00-10:45 am **Break**

Moderator: Carlos Davidson, Department of Environmental Studies, California State University, Sacramento, CA

10:45-11:05 am **Seasonal Movements of the Foothill Yellow-legged Frog (*Rana boylei*) in Tehama County, California.** Ryan Bourque and Sharyn Marks, Humboldt State University, Arcata, CA. (20 minutes)

11:05-11:25 am **Habitat Variability Observed at Foothill Yellow-legged Frog (*Rana boylei*) Breeding Locations in Several Large River Drainages along the West Slope of the Sierra Nevada: Implications for Developing Survey Strategies.** Craig Seltenrich<sup>1\*</sup> and Alicia Pool.<sup>2</sup> <sup>1</sup>ECORP Consulting, Roseville, CA; <sup>2</sup>PG&E, San Ramon, CA. (20 min.)

11:25-11:45 am **The Sierra Nevada Amphibian Monitoring Program: A Long-Term Bioregional Approach.** Cathy Brown, PSW Research Station, US Forest Service, Berkeley. (20 min)

11:45-12:00 pm **Update on the Mountain Yellow-legged Frog Restoration Project in Sequoia and Kings Canyon National Parks.** Danny Boiano, Sequoia and Kings Canyon National Parks, Three Rivers, CA. (15 minutes)

12:00-1:30 pm **Lunch**

Moderator: Lara Rachowicz, Department of Integrative Biology, University of California, Berkeley, CA

### ***RANA BOYLI* AND *R. MUSCOSA* (cont'd.)**

1:30-1:50 pm **A Skeletochronological Study of the Longevity and Age Structure of the Mountain Yellow-legged Frog, *Rana muscosa*, in the Sierra Nevada, California.** Kathleen R. Matthews<sup>1\*</sup> and Claud Miaud.<sup>2</sup> <sup>1</sup>Sierra Nevada Research Center, US Forest Service, Berkeley, CA. (20 min.)

### **PESTICIDES AND AMPHIBIANS**

1:50-2:10 pm **Pesticide Impacts on Amphibian Populations in the Sierra Nevada Mountains: Results of Field Studies and Laboratory Experiments.** Gary Fellers,<sup>1\*</sup> Patrick Kleeman,<sup>1</sup> and Donald Sparling.<sup>2</sup> <sup>1</sup>Biological Resources Division, US Geological Survey, Point Reyes, CA; <sup>2</sup>Cooperative Wildlife Research Laboratory, Southern Illinois University, Carbondale, IL. (20 min)

2:10-2:30 pm **Fish, Pesticides and the Decline of Mountain Yellow-legged Frogs.** Carlos Davidson<sup>1\*</sup> and Roland Knapp.<sup>2</sup> <sup>1</sup>Department of Environmental Studies, California State University, Sacramento, CA; <sup>2</sup>University of California, Sierra Nevada Aquatic Research Laboratory, Mammoth Lakes, CA. (20 min)

2:30-2:50 pm **Current Studies, Regulation and Legal Case Developments Regarding Pesticides That May Be Affecting Amphibians in California.** Michael Graf, El Cerrito, CA. (20 min).

### **RETURN TO *RANA BOYLI***

2:50-3:05 pm **Crayfish Predation on Foothill Yellow-legged Frog (*Rana boylei*) Egg Masses in the Northern Sierra Nevada.** Joe Drennan, Ron Jackman, Karla Marlow, Kevin Wiseman, Jason Minton, and Jane Kim, Garcia and Associates (GANDA), San Francisco, CA. (15 min)

3:05-3:35 pm **Break**

Moderator: Mark Jennings, Rana Resources, Davis, CA

### **CHYTRIDIOMYCOSIS**

3:35-3:55 pm **Host-Pathogen Population Dynamics of Chytridiomycosis in Mountain Yellow-legged Frogs in the Sierra Nevada Mountains, California.** Cherie Briggs, Department of Integrative Biology, University of California, Berkeley, CA. (20 min)

3:55-4:15 pm **How Useful Is Tadpole Mouthpart Depigmentation as an Indicator of Chytridiomycosis?** Roland Knapp, University of California, Sierra Nevada Aquatic Research Laboratory, Mammoth Lakes, CA. (20 min)

4:15-4:35 pm **Can *Batrachochytrium dendrobatidis* Survive in the Environment Without an Amphibian Host? Preliminary Results from a Field Experiment with *Rana muscosa*.** Vance Vredenburg, Department of Integrative Biology, University of California, Berkeley, CA. (20 min)

#### **SOUTHERN CALIFORNIA AMPHIBIANS**

4:35-4:55 pm **Fires and Other Burning Issues from Southern California in Frog/Toad Conservation.** Robert Fisher, Biological Resources Division, US Geological Survey, San Diego, CA. (20 min)

4:55-5:00 pm **Wrap-up.**

\* Indicates speaker in multi-authored talk.