

**Declining Amphibian Populations Task Force
California-Nevada Working Group
January 12-14, 2006**

**Van Duzer Theatre
Humboldt State University
Arcata, CA**

FINAL AGENDA (rev. 2)

Chair: David Bradford, US Environmental Protection Agency
Local Committee: Hartwell Welsh (US Forest Service), Don Ashton (US Forest Service), Jamie Bettaso (US Fish & Wildlife Service), Kary Schlick (US Forest Service)
Meeting Supporters: Partners in Amphibian and Reptile Conservation (PARC), US Bureau of Land Management, US Fish and Wildlife Service, and US Forest Service

Thursday, January 12, 2006

7:45-8:30 am **Registration.**

8:30-8:40 am **Introduction and Announcements.** David Bradford, Landscape Ecology Branch, US Environmental Protection Agency, Las Vegas, NV

PACIFIC NORTHWEST

8:40-9:00 am **Amphibian Population Status on Northwest California Landscapes: What is the Role of Anthropogenic Disturbance in Declines of Amphibians in Northern California?** Hartwell Welsh, Jr, US Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab., Arcata, CA. (20 min.)

9:00-9:20 am **Amphibian Conservation and Research on US Pacific Northwest Federal Lands.** Dede Olson, USDA Forest Service, Pacific Northwest Research Station, Corvallis, OR (20 min.)

KEYNOTE ADDRESS

9:20-10:05 am **Long-term Amphibian Studies, DAPTF, and PARC: A Natural Alliance.** J. Whitfield Gibbons, Professor of Ecology and Senior Research Scientist, University of Georgia, Savannah River Ecology Laboratory, Aiken, SC.

10:05-10:50 am **Break**

Moderator: Jef Jaeger, Department of Biological Sciences, University of Nevada, Las Vegas, NV

PACIFIC NORTHWEST (cont'd.)

10:50-11:10 am **Challenges of Monitoring Headwater Amphibians: Searching for a Pattern Among the Warts.** Lowell Diller* and Laura Burkholder, Green Diamond Resource Co., Korb, CA. (20 min.)

- 11:10-11:30 am **Population Parameters of Coastal Tailed Frogs in Northwestern California.** Laura Burkholder* and Lowell Diller, Green Diamond Resource Co., Korb, CA (20 min)
- 11:30-11:40 am **A New Alternative Method for Restraining Frogs.** Ryan Bourque, Dept. of Biological Sciences, Humboldt State University, Arcata, CA. (10 min)
- 11:40-11:55 am **Landscape-scale Risk Assessment for Current and Future UV-B Exposure of Alpine Amphibians of the Pacific Northwest.** Wendy Palen, Dept. of Integrative Biology, Univ. of California, Berkeley, CA. (15 min)

CASCADES FROG

- 11:55-12:15 pm **Reproductive Ecology and Breeding Migration Patterns of the Cascade's Frog (*Rana cascadae*) in the Trinity Alps Wilderness, California.** Clara Wheeler*, Justin Garwood, and Hartwell Welsh, Jr., US Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab., Arcata, CA. (20 min)
- 12:15-1:30 pm **Lunch**
- Moderator: Cathy Brown, US Forest Service, Pacific Southwest Research Station, Berkeley, CA
- 1:30-1:45 pm **Critically Low Numbers of Cascades Frog in the Lassen Region.** Jonathan Stead^{1*}, Hartwell Welsh², and Karen Pope². ¹Graduate Group in Ecology, Univ. of California, Davis, CA; ²US Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab., Arcata, CA. (15 min)

PARC

- 1:45-2:45 pm **Aligning Northwest Herp Conservation Issues, Actions, and Funding: What's broken? How do we fix it? Where's the money?** Jeff Holmes¹, Priya Nanjappa-Mitchell², and Ernie Garcia³. ¹Partners in Amphibian and Reptile Conservation (PARC), co-chair, Southeastern PARC, and Conservation Southeast, Inc.; ²PARC State Agencies Coordinator, Gurnee, IL; ³PARC Federal Agencies Coordinator, US Fish and Wildlife Service, Weaverville, CA. (60 min.)

RELICT LEOPARD FROG

- 2:45-3:00 pm **Status of Relict Leopard Frogs, *Rana onca*, in Arizona and Nevada.** Cristina Velez^{1*}, and Ross Haley². ¹Public Lands Institute, University of Nevada Las Vegas, Las Vegas, NV; ²National Park Service, Lake Mead National Recreation Area, Boulder City, NV. (15 min)
- 3:00-3:30 pm **Break**
- Moderator: Amy Lind, US Forest Service, Sierra Nevada Research Center, Davis, CA
- 3:30-3:45 pm **Habitat Selection by the Relict Leopard Frog (*Rana onca*): Assessing Effects of Vegetation Encroachment.** Sean Harris^{1*}, Jef Jaeger¹, Chad Cross², and David Bradford³. ¹Dept. of Biological Sciences, Univ. of Nevada, Las Vegas, NV;

²Environmental and Occupational Health Program, Univ. of Nevada, Las Vegas, NV; ³US Environmental Protection Agency, Landscape Ecology Branch, Las Vegas, NV. (15 min)

3:45-4:00 pm **Thermal Sensitivity of Growth, Development and Temperature Selection of the Relict Leopard Frog (*Rana onca*).** Jeffrey Goldstein^{1*}, Karin Hoff², and Stanley Hillyard³. ¹Dept. of Biological Sciences, University of Nevada Las Vegas, Las Vegas, NV; ²Dept. of Biology, University of Nevada, Reno, NV; ³School of Dental Medicine, University of Nevada Las Vegas, Las Vegas, NV. (15 min)

SOUTHERN CALIFORNIA

4:00-4:15 pm **The Endangered Arroyo Toad: How is It Doing?** Clayton Creed, US Fish & Wildlife Service, Ventura, CA. (15 min)

4:15-4:35 pm **Update on the *Rana draytonii* and *Rana muscosa* Situations in Southern California.** Robert Fisher^{1*}, Adam Backlin¹, Cynthia Hitchcock¹, Stacie Hathaway¹, and Russell Smith². ¹USGS Western Ecological Research Center, San Diego Field Station, San Diego, CA; ²Los Angeles Zoo, Los Angeles, CA. (20 min)

YOSEMITE TOAD

4:35-4:50 pm **Determining the Effects of Livestock Grazing on Yosemite Toads (*Bufo canorus*) and Their Habitat.** Amy Lind^{1*}, Robert Grasso¹, Sean Parks¹, Peter Stine¹, Barbara Allen-Diaz², Susan McIlroy², Ken Tate³, Leslie Roche³, William Frost⁴, and Neil McDougald⁴. ¹USDA Forest Service, Sierra Nevada Research Center, Davis, CA; ²College of Natural Resources, Univ. of California, Berkeley, CA; ³Dept. of Plant Science, Univ. of California, Davis, CA; ⁴Univ. of California, Cooperative Extension, Division of Agriculture and Natural Resources. (15 min.)

DISEASE/CONTAMINANTS

4:50-5:05 pm **Separate and Combined Effects of Nitrate and the Pathogenic Water Mold *Saprolegnia* on Survival of Amphibian Larvae.** John Romansic*, Kristin Diez, Elise Higashi, and Andrew Blaustein. Dept. of Zoology, Oregon State University, Corvallis, OR (15 min.)

BANQUET AT NORTH COAST INN

6:00 pm **Reception with no-host bar.**

6:30 pm **Dinner.**

7:30 pm **Banquet Presentation: Amphibian and Reptile Field Work in Afghanistan as an Invited Guest of the Taliban.** Ted Papenfuss, Research Specialist, Museum of Vertebrate Zoology, University of California, Berkeley, CA.

POSTERS

All Day,
Thurs-Fri

Cannibalism in the Foothill Yellow-legged Frog (*Rana boylei*). Kevin Wiseman¹, Karla Marlow¹, Joseph Drennan¹, Ronald Jackman¹, and Jamie Bettaso².
¹Garcia and Associates, San Francisco, CA; ²US Fish and Wildlife Service, Arcata, CA.

All Day,
Thurs-Fri

Columbia Spotted Frog Monitoring, NE Nevada. Maija Meneks, US Forest Service, Humboldt-Toiyabe National Forest.

All Day,
Thurs-Fri

Re-introducing the Foothill Yellow-legged Frog to Pinnacles National Monument. Paul Johnson and Robert Saulino, Pinnacles National Monument, Paicines, CA.

All Day,
Thurs-Fri

Combining Field Protocols, Integrated Database Design and Data Reduction to Improve Data Integrity Among Partners in ARMI. Chris Brown¹, Donn Holmes¹, Blake Hossack², and Robert Fisher¹. ¹USGS Western Ecological Research Center, San Diego Field Station, San Diego, CA; ²USGS Northern Rocky Mountain Science Center, Missoula Field Station

All Day,
Thurs-Fri

Preliminary Findings of Sierra Nevada High Mountain Lake Surveys: 2001-2004. Rick Ziegler, California Department of Fish and Game, Bishop, CA.

All Day,
Thurs-Fri

Wildlife Crossings Toolkit; www.wildlifecrossings.info. Sandra Jacobson, USDA Forest Service, Pacific Southwest Research Station, Arcata, CA.

Friday, January 13, 2005

8:00-8:30 am **Registration.**

8:30-8:35 am **Announcements.** David Bradford, US EPA.

DISEASE/CONTAMINANTS (cont'd.)

Moderator: Jamie Bettaso, US Fish and Wildlife Service, Arcata, CA.

8:35-8:55 am **An Update on Frogs, Contaminants, and Disease Research.** Gary Fellers, USGS Western Ecological Research Center, Point Reyes National Seashore, Point Reyes, CA. (20 min.)

8:55-9:15 am **Effects of Density on *Batrachochytrium dendrobatidis* Transmission in Mountain Yellow-legged Frogs (*Rana muscosa*).** Lara Rachowicz^{1*} and Cherie Briggs².
¹Resources Management and Science, Yosemite National Park, Yosemite, CA; ²Dept. of Integrative Biology, Univ. of California, Berkeley, CA. (20 min.)

9:15-10:00 am **Dilemmas in Amphibian Management: Disease and Translocation, a Group Discussion.** Dawne Becker, California Dept. of Fish and Game, Bishop, CA. (45 min.)

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

Moderator: Robert Fisher, USGS Western Ecology Research Center, San Diego Field Station, San Diego, CA.

FOOTHILL YELLOW-LEGGED FROG

10:45-11:05 am ***Rana boylei* Plasticity and Management Under Dam-Controlled Flows in the Northern West-Slope Sierra Nevada.** Ryan Peek and Sapna Khandwala, Stillwater Sciences, Berkeley, CA. (20 min)

11:05-11:25 am **Evaluating the Accuracy of Different Monitoring Designs by Subsampling a 14-Year *R. boylei* Eggmass Census.** Sarah Kupferberg^{1*} and Wendy Palen². ¹Quest Engineering Corp., Point Richmond, CA; ²Dept. of Integrative Biology, Univ. of California, Berkeley, CA. (20 min.)

11:25-11:40 am **Climatic and Water Flow Triggers Associated With Breeding and Movement in a Foothill Yellow-legged Frog (*Rana boylei*) Population on the North Fork Feather River, California.** Joseph Drennan*, Ronald Jackman, Karla Marlow, and Kevin Wiseman, Garcia and Associates, San Francisco, CA. (15 min)

RED-LEGGED FROG (mostly)

11:40-12:00 am **Lessons Learned While Doing Maintenance Activities Where There Are California Red-legged Frogs.** Jennifer Hogan, California Dept. of Water Resources, Sacramento, CA. (20 min.)

12:00-12:15 pm **(Meta)population Dynamics of a Threatened Native Amphibian, *Rana draytonii*.** Antonia D'Amore, Dept. of Ecology and Evolutionary Biology, Univ. of California, Santa Cruz, Santa Cruz, CA. (15 min)

12:15-1:30 pm **Lunch**

Moderator: Don Ashton, US Forest Service, Pacific Southwest Research Station, Redwood Sciences Laboratory, Arcata, CA.

RED-LEGGED FROG (mostly) (cont'd.)

1:30-1:45 pm **Interannual Changes in the Distribution of Amphibians and Associated Threats in the Elkhorn Slough Region.** Valentine Hemingway^{1,2*}, Antonia D'Amore^{1, 2}, and Kerstin Wasson¹. ¹Elkhorn Slough National Estuarine Research Reserve, Watsonville, CA; ²Univ. of California Santa Cruz, Dept. of Ecology and Evolutionary Biology, Santa Cruz, CA. (15 min)

GENETICS/PHYLOGEOGRAPHY

1:45-2:00 pm **Phylogeography of *Hydromantes shastae*: Implications for Management.** Robert Bingham, Dept. of Integrative Biology, University of California, Berkeley, CA. (15 min)

2:00-2:20 pm **The Effect of Habitat Quality on Genetic Diversity in a Riparian Frog Species (*Rana boylei*).** Jennifer Dever, University of San Francisco, Biology Dept., San Francisco, CA. (20 min).

2:20-2:30 pm **Hybridization Between Native California Tiger Salamanders (*Ambystoma californiense*) and Non-native Tiger Salamanders (*Ambystoma tigrinum*): Developing Management Strategies.** William McIver, US Fish and Wildlife Service, Ventura, CA. (10 min)

MOUNTAIN YELLOW-LEGGED FROG

2:30-2:50 pm **Mountain Yellow-legged Frog (*Rana muscosa*) Breeding Dynamics in Dusy Basin, Kings Canyon National Park: How do Variable Snowpack and Lake Water Levels Affect Recruitment?** Kathleen Matthews¹, Krishna Feldman^{1*}, and Igor Lacan². ¹USDA Forest Service, Pacific Southwest Research Station, Berkeley, CA; ²Univ. of California, Berkeley, Dept. of Environmental Science, Policy and Management, Berkeley, CA. (20 min)

2:50-3:20 pm **Break**

Moderator: Hartwell H. Welsh, Jr., US Forest Service, Pacific Southwest Research Station, Redwood Sciences Laboratory, Arcata, CA.

3:20-3:35 pm **Summer Home Range and Movements of Female Mountain Yellow-legged Frogs (*Rana muscosa*) in a Northern Sierra Nevada Stream.** Greta Wengert^{1*}, Mourad Gabriel¹, James Bettaso², Brian Shaw³, and Don Ashton². ¹MGW Biological, Arcata, CA; ²EartHerp, Manila, CA; ³Klamath Wildlife Resources, Redding, CA. (15 min)

FISH-RELATED

- 3:35-3:55 pm **Effects of Fish Stocking and Fish Removal on Cascades Frog (*Rana cascadae*) and other Native Species.** Karen Pope^{1,2*}, Sharon Lawler¹, and Hart Welsh². ¹Ecology Graduate Group and Entomology Dept., Univ.of California, Davis, CA; ²US Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab., Arcata, CA. (20 min)
- 3:55-4:15 pm **Indirect Effects of Introduced Trout on Native Amphibians in Northern California by Expansion of an Opportunistic Predator: Does the Hyperpredation Hypothesis Apply?** Justin Garwood*, Karen Pope, and Hart Welsh. US Forest Service, Pacific Southwest Research Station, Redwood Sciences Lab., Arcata, CA. (20 min.)
- 4:15-4:35 pm **Palatability and Antipredator Response of Yosemite Toads (*Bufo canorus*) to Nonnative Brook Trout (*Salvelinus fontinalis*) in the Sierra Nevada Mountains of California .** Robert L. Grasso^{1*}, Ronald Coleman¹, and Carlos Davidson². ¹California State University, Sacramento, CA; ²San Francisco State University, San Francisco, CA. (20 min.)
- 4:35-4:45 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. (10 min)
- 4:45-4:55 pm **Wrap-up.** Dave Bradford.

Saturday, January 14, 2006

- 8:00-2:30 pm **Field Trip.** Meet at North Coast Inn lobby.

* Indicates speaker in multi-authored talk.