

# Desert Fishes Council



Consejo de los Peces del Desierto

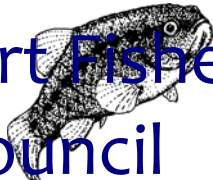
*Dedicated to the Conservation of North America's Arid Land Ecosystems*

## 41st Annual Meeting of the Desert Fishes Council November 19-22, 2009 Schedule-at-a-Glance

\*All activities are at the Furnace Creek Visitors Center unless otherwise noted

Start	End	Event
<b>Wednesday, November 18</b>		
17:00	21:00	Registration and presentation loading
<b>Thursday, November 19</b>		
8:00	18:00	Registration
8:30	8:35	Welcome to DFC (Stewart Reid, Phil Pister)
8:35	8:45	Welcome to Death Valley National Park (Sarah Craighead, NPS)
8:45	9:45	Dr. Brian W. Coad, Canadian Museum of Nature "Fishes of Iran"
9:45	10:00	Dr. Robert Behnke, Professor Emeritus Colorado State University "Biblical Zoogeography: Fishes of Jordan River and Sea of Galilee"
10:00	12:15	Ash Meadows Symposium, (Cristi Baldino , Moderator)
12:15	13:30	LUNCH
13:30	15:00	Devils Hole Symposium, (Paul Barrett, Moderator)
15:00	17:15	General Session 1, ( Andrew Martin/Eric Gustafson, Moderator(s))
<b>Friday, November 20</b>		
9:00	12:00	General Session 2, (Stephanie Carman, Moderator)
12:00	13:30	LUNCH
13:30	15:30	General Session 3, (Melissa Trammell, Moderator)
15:30	16:30	Poster Session
16:30	18:00	Business Meeting
17:00	23:00	Barbeque Dinner
<b>Saturday, November 21</b>		
9:00	12:00	General Session 4, (Peter Reinthal, Moderator)
12:00	13:30	LUNCH
13:30	17:00	General Session 5, (Steve Parmenter, Moderator)
<b>Sunday, November 22</b>		
8:00	15:00	Field Trip to Ash Meadows

# Desert Fishes Council



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*Dedicated to the Conservation of North America's Arid Land Ecosystems*

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Wednesday, November 18, 2009

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**17:00–21:00 Arrival, check-in and presentation loading at the Furnace Creek Visitors Center**

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Thursday, November 19, 2009

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**8:30-8:45 Introduction**

- Stewart Reid, DFC President
- Phil Pister, DFC Executive Secretary
- Sarah Craighead, Superintendent, Death Valley National Park

**8:45-10:00 Invited Speakers: Stewart Reid, Moderator**

**8:45 Desert Fishes of Iran**

Coad, Brian W. <sup>1</sup>, Esmaeili, Hamid R. <sup>2</sup>. (1-Canadian Museum of Nature, Ottawa, 2-Shiraz University, Iran).

**9:45 Biblical Zoogeography: Fishes of Jordan River and Sea of Galilee**

Behnke, Robert <sup>1</sup>. (1-Emeritus, Colorado State University).

**10:00-12:15 Ash Meadows Symposium: Cristi Baldino, Moderator**

**10:00 Celebrating Ash Meadows National Wildlife Refuge: 25 years along the road to recovery**

Baldino, Cristi R. <sup>1</sup>, McKelvey, Sharon D. <sup>1</sup>, Weissenfluh, Darrick S. <sup>1</sup>, Taylor, Kathie A. <sup>2</sup>. (1-U.S. Fish and Wildlife Service, 2-Argenta Ecological Consultants).

**10:15 Hydrologic and aquatic habitat restoration at Ash Meadows National Wildlife Refuge: A refuge-wide restoration plan**

Andress, Robert J. <sup>1</sup>, McKelvey, Sharon <sup>2</sup>, Baldino, Cristi R. <sup>2</sup>, Weissenfluh, Darrick <sup>2</sup>, Scoppettone, Gayton G. <sup>3</sup>. (1-Otis Bay Ecological Consultants, 2-United States Fish and Wildlife Service, 3-United States Geological Survey).

**10:30 Interactive advantage of Ash Meadows pupfish over sailfin molly and implications for Ash Meadows Spring system rehabilitation**

Scoppettone, G. Gary<sup>1</sup>, Rissler, Peter H.<sup>1</sup>. (1-United States Geological Survey, Biological Research Discipline, Western Fisheries Research Center, Reno Field Station).

**10:45 Development and assessment of population dynamics models for Ash Meadows fishes**

Wilde, Gene R.<sup>1</sup>. (1-Texas Tech University).

**11:00 Inferred connectivity among Ash Meadows pupfish (*Cyprinodon nevadensis mionectes*): Populations based on mtDNA and microsatellites**

Martin, Andrew<sup>1</sup>. (1-University of Colorado, Dept of Ecology and Evolutionary Biology).

**11:15 Hydrologic and aquatic habitat restoration at Fairbanks and Soda Springs, Ash Meadows National Wildlife Refuge to improve habitat quality for the Ash Meadows pupfish, *Cyprinodon nevadensis mionectes*, Ash Meadows speckled dace, *Rhinichthys osculus nevadensis*, and thermal endemic invertebrate species**

Andress, Robert J.<sup>1</sup>, McKelvey, Sharon<sup>2</sup>, Baldino, Cristi R.<sup>2</sup>, Weissenfluh, Darrick<sup>2</sup>, Scoppettone, Gayton G.<sup>3</sup>. (1-Otis Bay Ecological Consultants, 2-United States Fish and Wildlife Service, 3-United States Geological Survey).

**11:30 Macroinvertebrates of Ash Meadows National Wildlife Refuge, Nevada**

Stevens, Lawrence E.<sup>1</sup>, Andress, Robert J.<sup>2</sup>. (1-Museum of Northern Arizona, 2-Otis Bay Ecological Consultants).

**11:45 Habitat restoration and long-term conservation of Ash Meadows naucorids**

Parker, Michael S.<sup>1</sup>, Weissenfluh, Darrick S.<sup>2</sup>, Goodchild, Shawn<sup>3</sup>, Baldino, Cristi R.<sup>2</sup>, Simons, Lee<sup>3</sup>, Lundblad, Carl<sup>2</sup>, Cunningham, Phillip<sup>3</sup>. (1-Southern Oregon University, 2-U.S. Fish & Wildlife Service, Ash Meadows NWR, 3-U.S. Fish & Wildlife Service, Southern Nevada Field Office).

**12:00 Aquatic invasive species within Ash Meadows National Wildlife Refuge since 2008: Updates, challenges, and goals**

Weissenfluh, Darrick S.<sup>1</sup>, Baldino, Cristi R.<sup>1</sup>, McKelvey, Sharon D.<sup>1</sup>, Andress, Robert J.<sup>2</sup>, Scoppettone, G. Gary<sup>3</sup>, Hobbs, Brian<sup>4</sup>. (1-United States Fish and Wildlife Service, 2-Otis Bay Ecological Consultants, 3-United States Geological Survey, 4-Nevada Department of Wildlife).

**12:15-13:30 LUNCH**

**13:30-15:00 Devils Hole Symposium: Paul Barrett, Moderator**

**13:30 Conceptual influence model guides research, monitoring, and management of the Devils Hole pupfish *Cyprinodon diabolis***

Wilson, Kevin<sup>1</sup>, Bower, Michael<sup>1</sup>, Gaines, D. Bailey<sup>1</sup>. (1-National Park Service, Death Valley National Park).

**\*13:45 Identifying sources of error in adult surveys of Devils Hole pupfish *Cyprinodon diabolis***

Dzul, Maria<sup>1</sup>, Quist, Mike<sup>1</sup>, Dinsmore, Stephen<sup>1</sup>. (1-Iowa State University).

**\*14:00 Using stand-alone videography and water quality sensing to assess relationships between environmental conditions and reproductive behavior in Devils Hole pupfish**

Chaudoin, Ambre L.<sup>1</sup>, Feuerbacher, Olin G.<sup>1</sup>, Bonar, Scott A.<sup>1</sup>, Barrett, Paul<sup>2</sup>. (1-USGS Arizona Cooperative Fish and Wildlife Research Unit, 2-US Fish and Wildlife Service).

**\*14:15 Laboratory replication of Devils Hole algal and zooplankton communities**

Mapula, Justin <sup>1</sup>, Feuerbacher, Olin <sup>1</sup>, Bonar, Scott <sup>1</sup>, Wilson, Kevin <sup>2</sup>. (1-USGS, Arizona Cooperative Fish and Wildlife Research Unit, 2-National Park Service).

**14:30 Application of prophylactic disease treatments in laboratory rearing of hybrid Devils Hole pupfish**

Feuerbacher, Olin G <sup>1</sup>, Bonar, Scott A <sup>1</sup>, Barrett, Paul J <sup>2</sup>. (1-USGS Arizona Cooperative Fish and Wildlife Research Unit, 2-U.S. Fish and Wildlife Service).

**14:45 The Devils Hole Pupfish, another canary in the global climate change coal mine ?**

Hillyard, Stanley <sup>1</sup>, van Breukelen, Frank <sup>2</sup>. (1-UNLV, School of Dental Medicine, 2-UNLV, Division of Biological Sciences).

\*Denotes author under consideration for Hubbs Award

**15:00-17:15 General Session 1: Andrew Martin/Eric Gustafson, Moderators**

**\*15:00 Potential impacts of sex-biased dispersal in fragmented desert streams**

Boersma, Kate S. <sup>1</sup>, Lytle, David A. <sup>1</sup>. (1-Oregon State University, Department of Zoology).

**\*15:15 The effect of introduced western mosquitofish (*Gambusia affinis*) on ecosystem function in a desert spring**

Merkley, Steven S. <sup>1</sup>, Rader, Russell R. <sup>1</sup>. (1-Brigham Young University, Department of Biology).

**\*15:30 Reproductive phenology of fishes of the middle Rio Grande, New Mexico.**

Krabbenhoft, Trevor J. <sup>1</sup>, Platania, Steven P. <sup>2</sup>, Turner, Thomas T. <sup>1</sup>. (1-University of New Mexico, Department of Biology and Museum of Southwestern Biology, 2-American Southwest Ichthyological Researchers, LLC).

**\*15:45 Inferring dispersal of aquatic invertebrates from genetic variation: A comparative study of an amphipod, Talitridae *Hyalella azteca*, and mayfly, Baetidae *Callibaetis americanus*, in Great Basin springs**

Stutz, Heather L. <sup>1</sup>, Shiozawa, Dennis K. <sup>1</sup>. (1-Brigham Young University, Department of Biology).

**\*16:00 Distribution and habitat selection of endemic fish and invertebrate species within a desert spring refuge**

Weissenfluh, Darrick S. <sup>1</sup>, Wilde, Gene R. <sup>1</sup>, Baldino, Cristi R. <sup>2</sup>. (1-Texas Tech University, 2-U.S. Fish and Wildlife Service).

**\*16:15 Where are the good groceries? Food web dynamics in the Warm Springs region, Moapa, NV**

St. Saviour, Adam B. <sup>1</sup>, Gregory, Stanley V. <sup>1</sup>, Mesa, Matt <sup>1</sup>, Scoppettone, Gary G. <sup>1</sup>. (1-Oregon State University/ USGS, 2-Oregon State University, 3-USGS, 4-USGS).

**\*16:30 Effects of nonnative species on food web structure and variability in the Gila River drainage, New Mexico**

Pilger, Tyler J. <sup>1</sup>, Gido, Keith B. <sup>2</sup>, Propst, David L. <sup>3</sup>. (1-University of New Mexico, Department of Biology, 2-Kansas State University, Division of Biology, 3-New Mexico Department of Game and Fish).

**\*16:45 Genetic diversity of mountain suckers, *Catostomus (Pantosteus) platyrhincus***

Laitinen, Nina J. <sup>1</sup>, Shiozawa, Dennis K. <sup>1</sup>, Unmack, Peter J. <sup>1</sup>, Belk, Mark C. <sup>1</sup>. (1-Brigham Young University, Department of Biology).

**\*17:00 Testing the thermal tolerance of various life stages of fish using the critical thermal method**

Recsetar, Matthew <sup>1</sup>, Zeigler, Matthew <sup>2</sup>, Bonar, Scott A. <sup>1</sup>, Ward, David <sup>3</sup>, Caldwell, Colleen <sup>2</sup>. (1-USGS Arizona Cooperative Fish and Wildlife Research Unit, 2-USGS New Mexico Cooperative Fish and Wildlife Research Unit, 3-Arizona Game and Fish Department).

\*Denotes author under consideration for Hubbs Award

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Friday, November 20, 2009

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**9:00-12:00: General Session 2: Stephanie Carman, Moderator**

**9:00 Bonneville Basin Area Report**

Wilson, Krissy W. <sup>1</sup>. (1-Utah Division Wildlife Resources).

**9:15 Bonita Creek native fish restoration**

Blasius, Heidi <sup>1</sup>, Carter, Codey <sup>2</sup>, Clarkson, Robert <sup>3</sup>, Knowles, Glen <sup>4</sup>, Richardson, Mary <sup>2</sup>, Timmons, Ross <sup>2</sup>, Ward, David <sup>1</sup>. (1-Bureau of Land Management, 2-Arizona Game and Fish Department, 3-Bureau of Reclamation, 4-U.S. Fish and Wildlife Service, 5-U.S. Fish and Wildlife Service, 6-Arizona Game and Fish Department, 7-Arizona Game and Fish Department).

**9:30 Effects of wildland fire on lowland leopard frogs and their habitat in southeastern Arizona**

Wallace, J. Eric <sup>1</sup>, Swann, Don E. <sup>2</sup>. (1-University of Arizona, School of Natural Resources, 2-Saguaro National Park).

**9:45 Oregon \ Northern California Area Report, November 2008-2009**

Scheerer, Paul <sup>1</sup>, Leal, Jimmy <sup>2</sup>, Mauer, Alan <sup>3</sup>, Reid, Stewart <sup>4</sup>, Markle, Doug <sup>5</sup>, Richardson, Shannon <sup>1</sup>, Perkins, Ray <sup>1</sup>, Plemons, Samuel <sup>6</sup>. (1-Oregon Department of Fish and Wildlife, 2-Bureau of Land Management, 3-US Fish and Wildlife Service, 4-Western Fishes, 5-Oregon State University, 6-California Department of Fish and Game).

**10:00 Biodiversity and evolution of trout species in Mexico (*Salmonidae: Onchorhynchus*)**

Mayden, Richard <sup>1</sup>, Dillman, Casey <sup>1</sup>, Santo Camarillo, Anna Belia de los <sup>1</sup>, Espinosa-Pérez, Héctor <sup>2</sup>, García De León, Francisco <sup>3</sup>, Kuhajda, Bernard <sup>4</sup>, Tomelleri, Joseph <sup>5</sup>, Propst, David <sup>6</sup>. (1-Department of Biology, 3507 Laclede Ave., Saint Louis University, St. Louis, Missouri 63103 USA, 2-Instituto de Biología, Universidad Nacional Autónoma de México, México, D.F., México, 3-Centro de Investigaciones Biológicas del Noroeste, S.C. Mar Bermejo 195, Col. Playa Palo Santa Rita, C.P. 23090, P.O. Box 128. La Paz, México, 4-Department of Biological Sciences, Scientific Collections, Box 870345, The University of Alabama, Tuscaloosa, Alabama 35487-0345 USA, 5-Cimarron Trading, 8436 Meadow Lane, Leawood, Kansas 66206 USA, 6-Conservation Services Division, New Mexico Department of Game and Fish, P.O. Box 25112, Santa Fe, New Mexico 87504 USA).

**10:15 Biological and water quality monitoring of native fish sanctuaries in the lower Colorado River Basin, 2005-2009**

Carpenter, Jeanette <sup>1</sup>. (1-U.S. Geological Survey).

10:30 **Off-channel habitats to conserve endangered native fish of the lower Colorado River basin**  
Ley, Guillermo <sup>1</sup>, Fell, Michael <sup>1</sup>, Kesner, Brian <sup>1</sup>, Marsh, Paul <sup>1</sup>, McIntosh, Lori <sup>1</sup>. (1-Marsh & Associates).

10:45 **An assessment of long-term monitoring efforts for razorback sucker in Lake Mohave, Arizona and Nevada.**

Kesner, Brian R. <sup>1</sup>, Karam, Abraham P <sup>1</sup>, Pacey, Carol A. <sup>1</sup>, Marsh, Paul C. <sup>1</sup>. (1-Marsh & Associates LLC).

11:00 **Laboratory evaluations of stocking strategies for Gila topminnow (*Poeciliopsis occidentalis occidentalis*) and desert pupfish *Cyprinodon macularius*)**

Ward, David <sup>1</sup>, Robinson, Anthony <sup>1</sup>. (1-Arizona Game and Fish Department, Research Branch).

11:15 **Acclimation of razorback sucker, *Xyrauchen texanus*, in a manipulated flood plain wetland on the middle Green River, Utah**

Webber, Aaron <sup>1</sup>. (1-US Fish and Wildlife Service).

11:30 **Progress on conservation measures for humpback chub and razorback sucker in the Colorado River below Glen Canyon Dam**

Speas, David W. <sup>1</sup>. (1-U.S. Bureau of Reclamation, Upper Colorado Regional Office).

11:45 **Nonnative removal and food web interactions in the Gila River, New Mexico**

Gido B, Keith <sup>1</sup>, Propst L, David <sup>2</sup>, Paroz, Yvette <sup>2</sup>, Pilger J, Tyler <sup>1</sup>. (1-Kansas State University, Division of Biology, 2-New Mexico Department of Game and Fish, Conservation Services Division).

12:00-13:30 **LUNCH**

13:30-15:30 **General Session 3: Melissa Trammell, Moderator**

13:30 **Morphological variation in “Yaqui sucker, *Catostomus bernardini*, and Rio Grande sucker, *Catostomus plebeius*” (Family Catostomidae)**

Neun, Heather R. <sup>1</sup>. (1-Saint Louis University, Department of Biology).

13:45 **Wait until dark: influence of turbidity on the foraging ecology of trout in the Colorado River, Grand Canyon**

Yard, Michael D. <sup>1</sup>, Coggins Jr., Lewis G. <sup>1</sup>, Baxter, Colden V. <sup>2</sup>. (1-U.S. Geological Survey, Grand Canyon Monitoring and Research Center, 2-Idaho State University, Department of Biological Sciences, Stream Ecology Center).

14:00 **Designing a naturalized rearing system for Gila trout *Oncorhynchus gilae* recovery**

James, Angela P. <sup>1</sup>, Brooks, James E. <sup>1</sup>. (1-U. S. Fish and Wildlife Service).

14:15 **Desert water bugs on the move: the effects of distance from potential source populations on colonization of novel habitats**

Bogan T, Michael <sup>1</sup>, Boersma S, Kate <sup>1</sup>. (1-Oregon State University, Department of Zoology).

14:30 **Northeast México Area Report, with a focus on Cuatrociénegas**

Hendrickson, Dean A. <sup>1</sup>. (1-Texas Natural Science Center, University of Texas at Austin).

14:45 **Genetic characterization and conservation status of pupfish in River Springs, California**  
Chen, Yongjiu <sup>1</sup>, Parmenter, Steve <sup>2</sup>, Pezold, Frank <sup>1</sup>. (1-Texas A & M University--Corpus Christi, Life Sciences Department, 2-California Department of Fish and Game).

15:00 **Repatriation of native fishes to Fossil Creek: An update of efforts from 2007 to 2009**  
Orabutt Jr., David E. <sup>1</sup>, Robinson, Anthony <sup>1</sup>, Carter, Codey <sup>1</sup>. (1-Arizona Game and Fish Department).

15:15 **A history of the restoration of Fossil Creek**  
Hedwall, Shaula <sup>1</sup>. (1-U.S. Fish and Wildlife Service).

### 15:30-16:30 Poster Session

#### **Aquatic invertebrate ecology in the Rio Grande, New Mexico: A comprehensive undergraduate training program**

Bishara K, Raphaelita <sup>1</sup>, Love A, Corey <sup>1</sup>, Johnson L, Erica <sup>1</sup>, Burdett S, Ayesha <sup>1</sup>, Turner F, Thomas <sup>1</sup>. (1-University of New Mexico, Museum of Southwestern Biology).

#### **\*Patterns of genetic diversity in *Notropis girardi* in the Canadian River and Pecos River, New Mexico.**

Diver, Tracy A. <sup>1</sup>, Osborne, Megan J. <sup>1</sup>, Turner, Thomas F. <sup>1</sup>. (1-University of New Mexico Department of Biology).

#### **\*Monitoring Devils Hole pupfish *Cyprinodon diabolis* larvae: improving survey design at multiple scales**

Dzul, Maria <sup>1</sup>, Quist, Mike <sup>1</sup>, Dinsmore, Steve <sup>1</sup>. (1-Iowa State University).

#### **\*High-resolution temperature monitoring in Devils Hole**

Hausner, Mark B. <sup>1</sup>, Tyler, Scott W. <sup>2</sup>, Wilson, Kevin P. <sup>3</sup>, Bower, Michael R. <sup>3</sup>. (1-University of Nevada Reno Graduate Program of Hydrologic Sciences, Reno, NV., 2-University of Nevada Reno Department of Geological Sciences and Engineering, Reno, NV., 3-Death Valley National Park, Pahrump, NV.).

#### **A nonlethal aging technique for threatened, endangered and sensitive fishes**

Rogers, Ron J. <sup>1</sup>, Albrecht, Brandon <sup>1</sup>. (1-BIO-WEST Inc.).

#### **Phylogenetic relationships of species of *Gila* in Mexico and related Western genera (Cypriniformes: Cyprinidae)**

Schonhuth, Susana I. <sup>1</sup>, Perdices, Anabel <sup>2</sup>, Lozano-Vilano, Lourdes <sup>3</sup>, Garcia de Leon, Francisco <sup>4</sup>, Espinosa, Hector <sup>5</sup>, Harris, Phillip M. <sup>6</sup>, Mayden, Richard L. <sup>1</sup>. (1-Saint Louis University, Biology Department, MO, USA, 2-Museo Nacional de Ciencias Naturales, Departamento Biodiversidad y Biología Evolutiva, Spain, 3-Universidad Autonoma de Nuevo Leon, Facultad de CC Biológicas, Mexico, 4-Centro de Investigaciones Biológicas del Noroeste, Mexico, 5-Universidad Nacional Autonoma de Mexico, Instituto de Biología, Mexico, 6-Universidad de Alabama, Department of Biological Sciences, USA).

#### **Complete mitochondrial genome sequentiation of native catfishes genus *Ictalurus* in Northwest Mexico: Phylogenetics implications/Secuenciación del genoma mitocondrial de los bagres nativos endémicos del género *Ictalurus* (Pisces: Ictaluridae) en el Noroeste de México y sus implicaciones filogenéticas**

Varela-Romero, Alejandro <sup>1</sup>, Grijalva-Chon, José M. <sup>1</sup>, Gutiérrez-Millán, Luis E. <sup>1</sup>, Yepiz-Plascencia, Gloria <sup>2</sup>. (1-Department of Science and Technology Research, University of Sonora, 2-Aquatic Molecular Biology Laboratory, CIAD).

## **New artificial streams for spawning spikedace (*Meda fulgida*) at Bubbling Ponds Research Facility**

Ward, David L. <sup>1</sup>. (1-Arizona Game and Fish Department, Research Branch).

\*Denotes author under consideration for Poster Award

**16:30-18:00 Business Meeting**

**17:00-23:00 Barbeque at Furnace Creek Ranch**

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Saturday, November 21, 2009

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**9:00-12:00 General Session 4: Peter Reinthal, Moderator**

**9:00 Thermal tolerances of the desert pupfish, *Cyprinodon macularius*: A case For rapid evolution**

Schoenherr, Allan A. <sup>1</sup>. (1-Division of Natural Sciences, Fullerton Colege).

**9:15 Impoundment subsidies to fish modify the riverine food webs of central Mexico**

Mercado-Silva, Norman <sup>1</sup>, Helmus, Matthre R. <sup>2</sup>, Vander Zanden, Jake <sup>3</sup>. (1-Arizona Cooperative Fish and Wildlife Unit, School of Natural Resources, University of Arizona, 2-Chinese Academy of Sciences, Xishuangbanna Tropical Botanic Garden, 3-Center for Limnology, University of Wisconsin-Madison).

**9:30 *Catostomus* in México: Phylogenetic Investigations**

Dillman, Casey B. <sup>1</sup>, Pilsits, Adria <sup>1</sup>, Mayden, Richard L. <sup>1</sup>. (1-Saint Louis University, Department of Biology).

**9:45 Indications of continued Lake Mead razorback sucker recruitment and management progression**

Albrecht, Brandon <sup>1</sup>, Holden, Paul <sup>1</sup>, Kegerries, Ron <sup>1</sup>. (1-BIO-WEST, Inc., Fisheries Section).

**10:00 Reciprocal predation promotes co-existence of native and non-native fishes: A Case study from the Mojave Desert.**

Henkanaththegedara, Sujana M. <sup>1</sup>, Fisher, Justin D. <sup>1</sup>, Stockwell, Craig A. <sup>1</sup>. (1-Department of Biological Sciences, North Dakota State University, PO Box 6050, Fargo ND 58108-6050.).

**10:15 Role of the individual in the conservation of desert fishes**

Reid, Stewart B. <sup>1</sup>. (1-Western Fishes).

**10:30 Native fish conservation, and management in the upper/middle Rio Grande basin, Pecos River, Canadian River, Tularosa and Guzman basins, New Mexico during 2009**

Remshardt, W. Jason <sup>1</sup>, Davenport, Stephen R. <sup>1</sup>, Propst, David L. <sup>2</sup>, Carman, Stephanie M. <sup>2</sup>, Dudley, Robert K. <sup>3</sup>, Platania, Steven P. <sup>3</sup>. (1-U.S. Fish and Wildlife Service, New Mexico Fish and Wildlife Conservation Office, 2-New Mexico Department of Game and Fish, Conservation Services Division, 3-American Southwest Ichthyological Research Foundation).

**10:45 California golden trout, *Oncorhynchus mykiss aquabonita*: A management update**

Sims, Lisa <sup>1</sup>. (1-Inyo National Forest).



**11:00 Stress response of bonytail, roundtail chub, and razorback sucker to handling and confinement**

Hunt, Teresa <sup>1</sup>, Ward, David <sup>2</sup>, Gibb, Alice C. <sup>3</sup>. (1-Arizona Game and Fish, Research Branch and Northern Arizona University, 2-Arizona Game and Fish, Research Branch, 3-Northern Arizona University).

**11:15 Mechanical removal of nonnative fishes as a management tool for the recovery of Colorado pikeminnow, *Ptychocheilus lucius*, and razorback sucker, *Xyrauchen texanus*, in the San Juan River – New Mexico, Colorado and Utah**

Duran, Bobby R. <sup>1</sup>, Davis, Jason E. <sup>1</sup>, Furr, Weston <sup>1</sup>, Teller Sr., Ernest <sup>1</sup>. (1-U.S. Fish and Wildlife Service, New Mexico Fish and Wildlife Conservation Office).

**11:30 Translocation of endangered humpback chub, (*Gila cypha*), into Shinumo Creek, Grand Canyon National Park**

Leibfried, William <sup>1</sup>, Healy, Brian <sup>2</sup>, Omana, Emily <sup>3</sup>, Stevens, Lawrence <sup>3</sup>, Trammell, Melissa <sup>4</sup>. (1-W. Leibfried Environmental Services, 2-Grand Canyon National Park, 3-Grand Canyon Wildlands Council, 4-National Park Service).

**11:45 Desert fish conservation in California during 2009**

Parmenter, Steve <sup>1</sup>, Keeney, Sharon <sup>1</sup>, Hughson, Debra <sup>2</sup>. (1-California Department of Fish and Game).

**12:00-13:30 LUNCH**

**13:30-17:15 General Session 5: Steve Parmenter, Moderator**

**13:30 Can collaboration achieve what regulation hasn't? Redrock canyon redux: A case study**

Stefferd, Sally E. <sup>1</sup>, Stefferud, Jerome A. <sup>2</sup>. (1-Retired, U.S. Fish and Wildlife Service, Phoenix, AZ, 2-Retired, U.S. Forest Service, Phoenix, AZ).

**13:45 Colorado pikeminnow habitat availability, use, and selection in the San Juan River, New Mexico and Utah.**

de la Hoz, Ernesto A <sup>1</sup>, Holden, Paul <sup>1</sup>. (1-BIO-WEST, Inc).

**14:00 Temperature and apparent habitat partitioning between a rare springsnail (*Pyrgulopsis trivialis*) and a common snail (*Physa gyrina*)**

Rogowski, David L. <sup>1</sup>. (1-Texas Tech University).

**14:15 New approaches for analyzing the proteome and stress response mechanisms of euryhaline desert fishes**

Kültz, Dietmar <sup>1</sup>. (1-Dept. Anim Sci., UC Davis).

**14:30 Spikedace (*Meda fulgida*) and loach minnow (*Rhinichthys cobitis*) conservation in Arizona during 2007-2008**

Robinson, Anthony <sup>1</sup>. (1-Arizona Game and Fish Department).

**14:45 Desert fishes research and management in Texas during 2009**

Allan, Nathan <sup>1</sup>, Garrett, Gary <sup>2</sup>, Edwards, Robert <sup>3</sup>. (1-U.S. Fish and Wildlife Service, Austin, Texas, 2-Texas Parks and Wildlife Department, Ingram, Texas, 3-University of Texas - Pan American, Edinburg, Texas).

**15:00 Opportunities for establishing native fish conservation areas in the Upper Colorado River Basin**

Dauwalter, Daniel C. <sup>1</sup>, Sanderson, John <sup>2</sup>, Williams, Jack E. <sup>3</sup>, Sedell, James R. <sup>4</sup>. (1-Trout Unlimited, Boise, Idaho, 2-The Nature Conservancy, Ft. Collins, Colorado, 3-Trout Unlimited, Medford, Oregon, 4-National Fish and Wildlife Foundation, Portland, Oregon).

**15:15 Exercise conditioning of pond-reared razorback suckers (*Xyrauchen texanus*) decreases rate of downstream movement upon release into a stream environment.**

Avery, Luke A. <sup>1</sup>, Ward, David <sup>2</sup>, Marks, Jane C. <sup>1</sup>. (1-Northern Arizona University, Biology, 2-Arizona Game and Fish Department, Research Branch).

**15:30 Status of Warner suckers in the Warner Basin, Oregon**

Scheerer, Paul <sup>1</sup>, Jacobs, Steve <sup>1</sup>. (1-Oregon Department of Fish and Wildlife, Native Fish Investigations Project).

**15:45 Gila River Basin Native Fishes Conservation Program**

Duncan, Doug <sup>1</sup>. (1-US Fish & Wildlife Service).

**16:00 Upper Colorado Basin Area Report**

Hedrick, Trina <sup>1</sup>, Wilson, Krissy <sup>1</sup>, Cavalli, Pete <sup>2</sup>, Martin, Lori <sup>3</sup>. (1-Utah Division of Wildlife Resources, 2-Wyoming Game and Fish, 3-Colorado Division of Wildlife).

**16:15 2009 Area report for the Lower Colorado River Basin**

Sponholtz, Pamela <sup>1</sup>, Sorensen, Jeff, Voeltz, Jeremy, Avery, Luke, Healy, Brian, Albrecht, Brandon, Paroz, Yvette, Knowles, Glen. (1-U.S. Fish and Wildlife Service, 2-Arizona Game and Fish Department, 3-U.S. Fish and Wildlife Service, 4-Arizona Game and Fish Department, 5-National Park Service, Grand Canyon National Park, 6-Biowest, 7-New Mexico Department of Game and Fish, 8-U.S. Fish and Wildlife Service).

**16:30 Stocking of Gila topminnow, *Poeciliopsis o. occidentalis*, in Arizona's Gila River basin, an Arizona Game and Fish Department Central Arizona Fund Transfer Program update**

Crowder, Clayton D. <sup>1</sup>, Timmons, Ross <sup>1</sup>. (1-Arizona Game and Fish Department).

**16:45 Cutt through the bull trout, a mitochondrial DNA phylogeny of *Oncorhynchus clarkii*, cutthroat trout**

Unmack, Peter J. <sup>1</sup>, Shiozawa, Dennis K. <sup>1</sup>. (1-Brigham Young University, Department of Biology).

**17:00 Microsatellite loci reveal bottlenecks and genetic drift in Owens pupfish (*Cyprinodon radiosus*) populations**

Finger, Mandi <sup>1</sup>, Parmenter, Steve <sup>2</sup>, May, Bernie <sup>1</sup>. (1-University of California Davis, 2-California Department of Game and Fish).