

42nd Annual Meeting

17-21 November 2010

Moab, Utah

Desert Fishes Council

Consejo de los Peces  del Desierto

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

Wednesday 17 November 2010

17:00 - 21:00 Registration Moab Valley Inn -- Moab and Canyonlands rooms

18:00 – 21:00 Informal social Moab Valley Inn – Moab and Canyonlands rooms

Thursday 18 November 2010

ALL EVENTS WILL BE AT MOAB VALLEY INN – MOAB AND CANYONLANDS ROOMS

08:00 - 8:30 Welcome, Opening Remarks
08:30 - 12:00 GENERAL SESSION - 1
12:00 - 13:15 LUNCH
13:15 - 14:15 GENERAL SESSION - 2
14:15 - 14:30 BREAK
14:30 - 17:30 SPECIAL SYMPOSIUM
18:00 - 21:00 POSTER SESSION

Friday 19 November 2010

08:30 - 12:00 GENERAL SESSION - 3
12:00 - 13:15 LUNCH
13:15 - 16:30 GENERAL SESSION - 4
17:00 - 18:30 BUSINESS MEETING
19:00 - open BANQUET

Saturday 20 November 2010

08:30 - 12:00 GENERAL SESSION - 5
12:00 - 13:00 LUNCH
13:00 - 15:15 GENERAL SESSION – 6
15:15 - 17:00 GENERAL SESSION – 7

Sunday 21 November 2010

08:00 - 17:00 FIELD TRIP

42nd Annual Meeting

17-21 November 2010

Moab, Utah

Thursday 18 November 2010

8:00 OPENING REMARKS

GENERAL SESSION 1: Moderator--Dave Speas

08:30 Oregon / Northern California Area Report, November 2010

Scheerer, Paul ¹, Leal, Jimmy ², Mauer, Alan ³, Reid, Stewart ⁴, Markle, Douglas ⁵, Sidlauskis, Brian ⁵, Miller, Stephanie ¹, Divine, Paul ⁶. (1-Oregon Department of Fish and Wildlife, Native Fish Investigations Project, 2-Bureau of Land Management, 3-U.S. Fish and Wildlife Service, 4-Western Fishes, 5-Oregon State University, 6-California Department of Fish and Game).

08:45 The Evolution of Population Studies of the Mohave Tui Chub (*Siphateles bicolor mohavensis*) at NAWS China Lake. Williams, Susan ¹. (1-Desert Mountain RC&D).

09:00 Warner Sucker Investigations in the Warner Basin, Oregon

Scheerer, Paul ¹, Jacobs, Steve ¹, Richardson, Shannon ¹, Terwilliger, Mark ². (1-Oregon Department of Fish and Wildlife, Native Fish Investigations Project, 2-Oregon State University, Department of Fisheries and Wildlife).

09:15 Fine-scale invertebrate community partitioning in an arid headwater stream suggests unique habitat requirements for predators. Boersma, Kate S. ¹, Bogan, Michael T. ¹. (1-Oregon State University, Department of Zoology).

09:30 Genetic characterization of invading cyprinids in the Mojave River basin using diagnostic SNP and microsatellite markers

Layman, David A. ¹, Chen, Yongjiu ¹, Parmenter, Steve ², Hughson, Debra ³, Pezold, Frank ¹. (1-Texas A&M University, 2-California Dept. Fish and Game, 3-Mojave National Preserve).

09:45 Suppression of non-native Brown Trout and Brown Bullhead in a Modoc Sucker stream (northern California)

Reid, Stewart B. ¹. (1-Western Fishes).

10:00 Genetic characterization of Death Valley region speckled dace using SNP and microsatellite markers

Furiness, Sharon J ¹, Chen, Yongjiu ¹, Parmenter, Steve ², Pezold, Frank ¹. (1-Texas A&M University Corpus Christi, 2-California Department of Fish and Game).

Thursday 18 November 2010 (continued)

10:15 Genetic characterization of Owens River basin tui chubs using SNP and microsatellite markers

Gillis, Jamie ¹, Chen, Yongjiu ¹, Parmenter, Steve ², Pezold, Frank ¹. (1-Texas A&M University - Corpus Christi, 6300 Ocean Drive, Corpus Christi, TX 78412, 2-California Department of Fish and Game, 407 West Line Street, Bishop, CA 93514).

10:30 Genetic Analysis of Hybridization between Mohave tui chub and arroyo chub

Williams, Rachel C ¹, Chen, Yongjiu ¹, Parmenter, Steve ², Hughson, Debra ³, Pezold, Frank ¹. (1-College of Science and Technology, Texas A&M University – Corpus Christi, 6300 Ocean Drive, Corpus Christi, TX 78412, 2-California Department of Fish and Game, 407 West Line Street, Bishop, CA 93514, 3-Mojave National Preserve, 2701 Barstow Road, Barstow, CA 92311).

10:45 Unusual Dominance by Desert Pupfish in a Shallow Experimental Pond System Within the Salton Sea Basin

Saiki, Michael K. ¹, Martin, Barbara M. ¹, Anderson, Thomas W. ². (1-U.S. Geological Survey, Western Fisheries Research Center-Dixon Duty Station, 2-U.S. Geological Survey, Salton Sea Science Office).

11:00 Movement of Salt Creek pupfish (*Cyprinodon salinus salinus*) living in Salt Creek, Death Valley National Park, CA

Dzul, Maria C. ¹, Quist, Michael C. ², Dinsmore, Stephen J. ¹, Gaines, D. Bailey ³, Wilson, Kevin P. ³. (1-Department of Natural Resource Ecology and Management, Iowa State University, 2-U.S. Geological Survey, Idaho Cooperative Fish and Wildlife Research Unit, Department of Fish and Wildlife Resources, University of Idaho, 3-National Park Service).

11:15 Using Variance Components to Estimate Power in a Hierarchically Nested Sampling Design: Improving Monitoring of Larval Devils Hole Pupfish

Dzul, Maria C. ¹, Dixon, Philip M. ², Quist, Michael C. ³, Dinsmore, Stephen J. ¹, Bower, Michael R. ⁴. (1-Department of Natural Resource Ecology and Management, Iowa State University, 2-Department of Statistics, Iowa State University, 3-U.S. Geological Survey, Idaho Cooperative Fish and Wildlife Research Unit, Department of Fish and Wildlife Resources, University of Idaho, 4-U.S. Forest Service, Bighorn National Forest).

11:30 Removal of a desert pupfish *Cyprinodon macularius* population from temporary ponds at the Salton Sea

Keeney D, Sharon ¹, Walker T, Michael ², Thomas E, Valerie ³, Crayon J, John ¹. (1-California Department of Fish and Game, Fishery Biologist, Salton Sea Program, 2-Bureau of Reclamation, Lower Colorado Region, Resources Management, Salton Sea Program Manager, 3-Bureau of Reclamation, Lower Colorado Region, Environmental Compliance Manager).

11:45 Preliminary results of using stereo-video technology as a means of noninvasively measuring fish length to monitor population dynamics of the critically endangered Devils Hole pupfish, *Cyprinodon diabolis*

Gaines, D. Bailey ¹, Wilson, Kevin P. ¹, Bower, Michael R. ². (1-National Park Service, 2-U. S. Forest Service).

12:00 – 13:15 LUNCH

Thursday 18 November 2010 (continued)

GENERAL SESSION 2: Moderator--Andrew Martin

13:15 Genetic identification of Shoshone Spring and River Springs pupfishes using SNP and microsatellite markers

Bautista, Roxanne ¹, Gonzalez, Rocio ¹, Parmenter, Steve ², Chen, Yongjiu ¹, Pezold, Frank ¹. (1-Texas A&M University - Corpus Christi, 2-California Department of Fish and Game).

13:30 Application of surface disinfectants and antibiotics to hybrid Devils Hole pupfish eggs

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

13:45 Construction of a mesocosm re-creation of Devils Hole

Feuerbacher, Olin G. ¹, Bonar, Scott A. ¹, Chaudoin, Ambre L. ¹, Barrett, Paul J. ². (1-USGS Arizona Cooperative Fish and Wildlife Research Unit, 2-U.S. Fish and Wildlife Service).

14:00 Using remote-monitoring technologies to assess relationships between environmental conditions and reproductive behavior in Devils Hole pupfish

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

BREAK

SPECIAL SYMPOSIUM: Moderators--Chris Hoagstrom, Mike Bogan, and Jason Davis

“Effective conservation of desert fishes: traditional & novel approaches”

14:30 The Desert Fishes Council and Conservation - A History

Pister, Edwin P. (Phil) ¹. (1-Desert Fishes Council).

14:45 Fishes of Durango, Mexico

Lambarri Biol., Christian ¹. (1-Instituto de Biologia UNAM).

15:00 Restoring perennial flows on an arid land river. Case study: Pecos River, New Mexico

Davenport, Stephen ¹, Brooks, James ¹, Myers, Marilyn ², Hoagstrom Dr., Christopher ³. (1-U.S. Fish & Wildlife Service, New Mexico Fish and Wildlife Conservation Office, 2-U.S. Fish & Wildlife Service, Anchorage, Alaska, Fish and Wildlife Field Office, 3-Weber State University, Department of Zoology).

15:15 Comparison of aquatic habitat restoration projects at multiple scales at Ash Meadows National Wildlife Refuge: Recovery of the Ash Meadows Amargosa pupfish *Cyprinodon nevadensis mionectes*, Warm Springs pupfish, *Cyprinodon nevadensis pectoralis*, Ash Meadows speckled dace, *Rhinichthys osculus nevadensis*, and endemic aquatic invertebrate species

Andress, Robert J. ¹, Gourley, Chad R. ², McKelvey, Sharon ³, Baldino, Cristi R. ³, Weissenfluh, Darrick ³, Scopettone, Gayton G. ⁴. (1-Gradient Ecological, 2-Otis Bay Ecological Consultants, 3-United States Fish and Wildlife Service, 4-United States Geological Survey).

Thursday 18 November 2010 (continued)

15:30 Riverscape Genetics: A Management Tool for Long-Lived Colorado River Fishes

Douglas, Michael E. ¹, Douglas, Marlis R. ¹, Hopken, Matthew W. ¹. (1-Illinois Natural History Survey, University of Illinois).

15:45 Application of Best Management Practices as a conservation tool in Texas

Bean, Megan ¹, Birdsong, Timothy ¹, Garrett, Gary ¹. (1-Texas Parks and Wildlife Department, Inland Fisheries).

16:00 Prioritizing present and future conservation efforts for native fishes in the Lower Colorado River Basin

Strecker, Angela L. ¹, Olden, Julian D. ¹. (1-University of Washington, School of Aquatic and Fishery Sciences).

16:15 Interactions between desert pupfish, *Cyprinodon macularius*, and Gila topminnow *Poeciliopsis occidentalis*: implications for establishing and maintaining populations

Robinson, Anthony, T. ¹, Ward, David, L. ¹, Timmons, Ross, J. ¹, Duncan, Doug, K. ². (1-Arizona Game and Fish Department, 2-U.S. Fish and Wildlife Service, Arizona Ecological Services Field Office).

16:30 Genetic Characterization of an Admixed Species Complex as Adaptive Management Tool

Douglas, Marlis R. ¹, Douglas, Michael E. ¹. (1-Illinois Natural History Survey, University of Illinois).

16:45 Humanity and Evolution

Mueller, Gordon ¹. (1-Retired: USGS, BOR, NPS).

18:00-21:00 POSTER SESSION

Are northern crayfish, *Orconectes virilis*, resistant to CFT Legumine Fish Toxicant?

Sorensen, Jeff A. ¹. (1-Arizona Game and Fish Department).

Disperse and Dispatch: Increasing and maintaining native fish populations in the Pahrangat Valley

Guadalupe, Kevin ¹, Hobbs, Brian ¹. (1-Nevada Department of Wildlife, Las Vegas).

Biology Aspects of Four Mosquito Fish Species: *Gambusia senilis*, *G. hurtadoi*, *G. alvarezi*, & *G. zarski*, from Chihuahua, MÉXICO.

Valdes Gonzalez, Arcadio ¹, Lira Morales, David Azael ¹, Carreo-Zapiain, Ma. Teresa ¹. (1-Laboratorio de Acuicultura, FCB, UANL).

Identifying the drainage of origin of leatherside chub found in the Colorado River system

Barrager, Adam Q. ¹, Johnson, Jerald B. ¹. (1-Brigham Young University, Department of Biology).

Underwater survey methods to identify areas used by Razorback Sucker, *Xyrauchen texanus*, below Hoover Dam to Willow Beach, Arizona

Montony, Andrea ¹, Ulepich, Caireen ¹. (1-Bureau of Reclamation, Boulder City, NV).

18:00-21:00 POSTER SESSION (continued)

Distribution of Moapa dace and other fish in relation to wildfire at the Muddy River, southern Nevada

Simons, Lee H. ¹, Doyle, Cailin C. ², Simons, Laurie S. ³. (1-Nevada Fish and Wildlife Office, Las Vegas, U.S. Fish and Wildlife Service, 2-Southern Nevada Water Authority, 3-Desert National Wildlife Refuge Complex, U.S. Fish and Wildlife Service).

A Measure of Genetic Variability of *Meda fulgida* Based on Microsatellite Allele Frequencies

Trujillo, Jesse D. ¹, Pilger, Tyler J. ¹, Turner, Tom F. ¹. (1-University of New Mexico Department of Biology, Museum of Southwestern Biology).

A "thousand-year" flood provides long-term ephemeral habitat for "peripheral" fishes in the southern Sonoran Desert< Mexico

Findley, Lloyd T. ¹, Pérez-Tello, Mauricia ¹, Montgomery, W. Linn ². (1-Centro de Investigación en Alimentación y Desarrollo-Unidad Guaymas, 2-Northern Arizona University, Department of Biology).

Development and utility of exon-primed intron-crossing markers in conservation of desert fishes

Bautista, Roxanne ¹, Gillis, Jamie ¹, Li, Chenhong ², Parmenter, Steve ³, Chen, Yongjiu ¹, Pezold, Frank ¹. (1-Texas A&M University-Corpus Christi, 2-Grice Marine Laboratory, 3-California Department of Fish and Game).

Observations of Rio Grande silvery minnow *Hybognathus amarus* using a fish passage structure

Archdeacon, Thomas ¹, Remshardt, Jason ¹. (1-U.S. Fish and Wildlife Service; New Mexico Fish and Wildlife Conservation Office).

The "desert" pupfish five-year review

Duncan K., Douglas ¹. (1-USFWS).

Population distribution and size structure of northern leatherside chub, *Lepidomeda copei*, in the upper Bear River drainage.

Kelley, Sage K ¹, Wesner, Jeff ¹, Belk, Mark C ¹. (1-Brigham Young University, Department of Biology).

Is predation by invasive brown trout a threat to native fish persistence?

Thiedi, Gary ¹, Budy, Phaedra ², Wood, Jeremiah ³, Burbank, Nora ¹. (1-Dept of Watershed Sciences, Utah State University, 2-USGS Utah Cooperative Fish and Wildlife Research Unit, Dept of Watershed Sciences, Utah State University, 3-Montana Dept. of Fish, Wildlife, and Parks).

ANÁLISIS ALIMENTARIO DE LA TRUCHA YAQUI *Oncorhynchus* sp. (TELEOSTEI: Salmonidae) EN MESA TRES RÍOS, SONORA/Food habits of the Yaqui trout *Oncorhynchus* sp. (TELEOSTEI: Salmonidae) in Mesa Tres Rios, Sonora

Loera-Urias Sr., Leonides ¹, Varela-Romero Dr., Alejandro ¹. (1-Universidad de Sonora, Departamento de Investigaciones Científicas y Tecnológicas).

18:00-21:00 POSTER SESSION (continued)

VARIABILIDAD GENÉTICA DE LA TRUCHA YAQUI (*Oncorhynchus* sp) EN LA REGIÓN DE MESA TRES RÍOS, SONORA/Genetic variability of Yaqui trout (*Oncorhynchus* sp) in the Mesa Tres Rios area, Sonora

Ballesteros-Cordova Sr., Carlos ¹, Varela-Romero Dr., Alejandro . (1-Universidad de Sonora, Departamento de Investigaciones Científicas y Tecnológicas).

VARIABILIDAD GENÉTICA DEL BAGRE YAQUI, (*ICTALURUS PRICEI* (PISCES: ICTALURIDAE) EN LA CUENCA DEL RÍO YAQUI, SONORA Y CHIHUAHUA/Genetic variability of the Yaqui catfish(*Ictalurus pricei* (Pisces: Ictaluridae) in the Yaqui River basin, Sonora and Chihuahua

Trujillo-Villalba, María Irais ¹, Varela-Romero Dr., Alejandro . (1-Universidad de Sonora, Departamento de Investigaciones Científicas y Tecnológicas).

The importance of small tributary streams to endangered fishes of the Colorado River Basin: an example from the San Rafael River, Utah

Budy, Phaedra ¹, Thiede, Gary ², Bottcher, Jared ³, Walsworth, Tim ². (1-USGS Utah Cooperative Fish and Wildlife Research Unit, Dept of Watershed Sciences, Utah State University, 2-Dept of Watershed Sciences, Utah State University, 3-USGS Western Fisheries Research Center, Klamath Falls Field Station, Oregon).

Unknown waters of the Uintah Basin: evaluating the limnology, morphometry, and fish communities of seven lentic waters on the Uintah and Ouray reservation, Utah

Klobucar, Stephen ¹, Budy, Phaedra ², Thiede, Gary ¹. (1-Utah State University, Department of Watershed Sciences, 2-Utah State University, USGS Cooperative Fish and Wildlife Research Unit).

Current status of lotic freshwater ecosystems in Jalisco and Colima, Mexico: A historical fish-based index of biotic integrity analysis.

Mercado-Silva, Norman ¹, Lyons, John ², Gesundheit, Pablo ³. (1-School of Natural Resources and the Environment, University of Arizona, 2-University of Wisconsin Zoological Museum and Wisconsin Department of Natural Resources, 3-Instituto de Ecología, Universidad Nacional Autónoma de México).

New record of *Gobiesox fluviatilis* Briggs & Miller (1960) (Gobiesociformes: Gobiesocidae) from Zacatecas, México

Lozano Vilano, Ma de Lourdes ¹, García Ramírez, Ma Elena ¹, Contreras Balderas, Armando J. ¹. (1-Universidad Autónoma de Nuevo León, Laboratorio de Ictiología).

Spatial and temporal patterns of Pecos River fish assemblage

Bean, Megan G. ¹, Bonner, Timothy H. ¹, Bean, Preston T. . (1-Texas State University - San Marcos, Department of Biology/Aquatic Station).

Rediscovery of Headwater Catfish, *Ictalurus lupus* (Ictaluridae), in a Western Gulf Slope Drainage

Bean, Preston T. ¹, Forstner, Michael R. J. ², Bonner, Timothy H. ¹. (1-Texas State University, Department of Biology/Aquatic Station, 2-Texas State University, Department of Biology).

A Preliminary Analysis of Potential Hybridization between *Gambusia nobilis* and *G. geiseri* in a reconstructed desert wetland, San Solomon Cienega, Balmorhae State Park, Texas

Hargrave, Chad ¹. (1-Department of Biological Sciences, Sam Houston State University).

18:00-21:00 POSTER SESSION (continued)

A Survey of the Native Fishes of Big Springs Creek/Lake Creek, Snake Valley, Nevada

Ambos, Aaron ¹. (1-Las Valley Water District/Southern Nevada Water Authority).

Degradation of Colorado River native fish habitat as a result of the complex interactions between vegetation, hydrologic changes, and geomorphology

Manners, Rebecca ¹, Schmidt, John ². (1-Intermountain Center for River Rehabilitation and Restoration, Department of Watershed Sciences, Utah State University).

Effects of river drying on aquatic food web structure in the Rio Grande, New Mexico

Kraus, Jennifer S. ¹, Burdett, Ayesha S. ¹, Turner, Thomas F. ¹. (1-University of New Mexico, Museum of Southwestern Biology).

Evaluation of Rearing Razorback Suckers (*Xyrauchen texanus*) in Flowing Raceways at Lake Mead Fish Hatchery

Senger, Brandon L. ¹, Sjoberg, Jon C. ¹. (1-Nevada Department of Wildlife).

Closed Population Estimates of Humpback Chub, *Gila cypha*, in the Little Colorado River, Grand Canyon, AZ

Van Haverbeke, David R. ¹. (1-U.S. Fish and Wildlife Service).

The *Cyprinodon julimes* case study: An experience for the development of a conservation model in Mexico

Rodriguez-Pineda, J. Alfredo ¹, De la Maza-Benignos, Mauricio ¹, Lozano-Vilano, Ma. de Lourdes ², García-Ramirez, Maria Elena ², Vela-Valladares, Lilia ³, Parra-Gallo, Haydée ¹, Zapata-López, Jenny ¹. (1-World Wildlife Fund-Chihuahuan Desert Program, 2-UANL, San Nicolas de los Garza, Nuevo Leon, Mexico, 3-Amigos del Pandeño, A.C., Julimes, Chihuahua, México).

The biological control of mosquito larvae populations using larvivorous fish; an eco-friendly approach

Peralta, Matthew F. ¹, Burdett, Ayesha S. ¹, Turner, Thomas F. ¹. (1-University of New Mexico, Museum of Southwestern Biology).

Friday 19 November 2010

GENERAL SESSION 3: Moderator—Michael Douglas

08:30 Lower Colorado River Basin Area Report

Voeltz, Jeremy ¹. (1-U.S. Fish and Wildlife Service).

08:45 Gonopodial Meristic, its meaning for taxonomy review of Chihuahuan *Gambusias*

Valdés-González, Arcadio ¹, Carreón-Zapiain, Ma. Teresa ¹, Lira-Morales, David Azael ¹. (1-Affiliation 1 Laboratorio de Acuicultura, FCB, UANL).

09:00 Post-stocking mortality and movement of telemetered bonytail *Gila elegans* in Lake Havasu

Adelsberger, Christine M. ¹, Karam, Abraham P. ¹, Marsh, Paul C. ¹. (1-Marsh & Associates, LLC.).

09:15 Genetic Variation is the Spice of Life. Microsatellite Marker Analysis of Lake Mohave Razorback Sucker

Saltzgiver, Melody J. ¹, Marsh, Paul C. ², Dowling, Tom E. ¹. (1-Arizona State University, School of Life Sciences, 2-Marsh and Associates).

09:45 The Use of Remote Sensing PIT Scanners for Monitoring Habitat Preferences Among Razorback Sucker at Imperial Ponds NWR

Fencl, Jane S ¹, Kesner, Brian ¹, Ley, Guillermo ¹, Marsh, Paul C ¹. (1-Marsh & Associates, LLC.).

10:00 Advances in fish sampling: An overview of techniques and standardization

Bonar, Scott A. ¹. (1-USGS Arizona Cooperative Fish and Wildlife Research Unit, University of Arizona).

10:15 A Systematic Revision of the *Herichthys* Genus, with One New Genus and Three New Species Endemic to the Panuco-Tamesí River Basin, Mexico

De la Maza-Benignos, Mauricio ¹, Lozano-Vilano, Ma. de Lourdes ². (1-World Wildlife Fund-Chihuahuan Desert Program, 2-UANL, San Nicolas de los Garza, Nuevo Leon, Mexico).

10:30 Successes and Failures of Renovating Two Ponds at Imperial National Wildlife Refuge

Knecht, Tammy ¹, Montony, Andrea ², Thorson, Mitch ¹. (1-US Fish and Wildlife Service, Fish and Wildlife Conservation Office, Parker, AZ, 2-US Bureau of Reclamation, Boulder City, NV).

10:45 Population Estimates and Water Quality Summary for Native Fish Backwater Habitats (2009-2010)

Randall, Robert ¹, Thorson, Mitch ¹. (1-US Fish and Wildlife Service, Fish and Wildlife Conservation Office, Parker, AZ).

11:00 Connecting Children With Nature: Ensuring the Future of Conservation

Johnson, Jennifer ¹. (1-U.S. Fish and Wildlife Service).

11:15 Often dry, never boring: the unique and specialized invertebrate communities of ephemeral streams

Bogan, Michael T. ¹, Boersma, Kate ¹, Lytle, David A. ¹. (1-Oregon State University, Zoology Department).

Friday 19 November 2010 (continued)

11:30 Ammonia as a tool for eradication of northern crayfish, *Orconectes virilis*

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

11:45 Overriding Effects of Species-Specific Turbidity Thresholds on Hoop-Net Catch Rates of Native Fishes in the Little Colorado River, Arizona

Stone, Dennis M. ¹. (1-U.S. Fish and Wildlife Service).

12:00 – 13:15 LUNCH

GENERAL SESSION 4: Moderator—Marlis Douglas

13:15 Growth and survival of Apache trout *Oncorhynchus apache* under static and fluctuating temperature regimes typical of Southwestern streams

Recsetar, Matthew S. ¹, Feuerbacher, Olin ¹, Bonar, Scott A. ¹, Zeigler, Matt ², Colleen, Caldwell ². (1-University of Arizona Cooperative Fish and Wildlife Research Unit, 2-University of Arizona Cooperative Fish and Wildlife Research Unit, 3-University of Arizona Cooperative Fish and Wildlife Research Unit, 4-New Mexico State University Cooperative Fish and Wildlife Research Unit, 5-New Mexico State University Cooperative Fish and Wildlife Research Unit).

13:30 Is Havasu Creek a good candidate Stream for translocating humpback chub, *Gila cypha*?

Sponholtz, Pamela J. ¹, Pillow, Michael ¹, Healy, Brian ². (1-U.S. Fish and Wildlife Service, 2-Grand Canyon National Park).

13:45 A Second Translocation of Endangered Humpback Chub, *Gila cypha*, and Monitoring of Fish Community in Shinumo Creek, Grand Canyon National Park

Healy, Brian ¹, Omana, Emily ¹, Trammell, Melissa ², Leibfried, William ³, Spurgeon, Jon ⁴. (1-Grand Canyon National Park, 2-National Park Service, 3-Museum of Northern Arizona, 4-University of Missouri).

14:00 Changes in fish populations and habitat in East Fork of the Black River from 1988 to 2009

Meyer J, Kelly ¹, Lopez, Michael ², Terrill, Mark ³. (1-Arizona Game and Fish, 2-Arizona Game and Fish, 3-Arizona Game and Fish).

14:15 Bonneville Basin Area Report

Wilson, Krissy ¹. (1-Utah Division Wildlife Resources).

14:30 An evaluation of trout community population change following two years of mechanical removal of non-native brown trout: towards a better understanding of restoration options for imperiled native fishes

Budy, Phaedra ¹, Thiede, Gary P. ², Saunders, W. Carl ². (1-USGS Utah Cooperative Fish and Wildlife Research Unit, Dept of Watershed Sciences, Utah State University, 2-Dept of Watershed Sciences, Utah State University).

14:45 Status of least chub, *Notichthys phlegethontis*, in Utah

Mellon, Cassie D. ¹. (1-Utah Division of Wildlife Resources).

Friday 19 November 2010 (continued)

15:00 A mitochondrial DNA phylogeny of the mountain suckers, *Pantosteus*

Unmack, Peter J. ¹, Shiozawa, Dennis K. ², Laitinen, Nina J. ², Secor, Carol L. ³, Smith, Gerald R. ⁴, Mayden, Rick L. ⁵, Dowling, Tom E. ³. (1-Duke University, National Evolutionary Synthesis Center, 2-Brigham Young University, Department of Biology, 3-Arizona State University, School of Life Sciences, 4-University of Michigan, Museum of Zoology, 5-Saint Louis University, Department of Biology).

15:15 Longer food chains and crowded niche space: understanding trophic interactions between non-native and endemic, riverine desert fishes

Walsworth, Timothy ¹, Budy, Phaedra ², Thiede, Gary P. ¹. (1-Department of Watershed Sciences, Utah State University, 2-USGS Utah Cooperative Fish and Wildlife Research Unit, Utah State University).

15:30 The need for new and innovative solutions in Utah's endangered and sensitive species programs

Jones, Sarra L. ¹. (1-Utah Division of Wildlife Resources).

15:45 A comparative investigation of population size, structure, movement patterns and vital rates between two populations of bluehead sucker (*Catostomus discobolus*) in the Weber River, Utah: Identifying limiting factors to guide conservation

Thompson, Paul ¹, Webber, Aaron ², Budy, Phaedra ³, McKay, Samuel ⁴. (1-Utah Division of Wildlife Resources, 2-United States Fish and Wildlife Service, 3-Utah State University, USGS - UCFWRU, 4-Utah Division of Wildlife Resources).

16:00 Do introduced brown trout affect native fishes in western United States streams?

Burbank, Nora K. ¹, Hawkins, Charles P. ¹. (1-Utah State University).

16:15 Spatial Distribution and Habitat Use of Least Chub in Three Geographically Distinct Spring Systems

Grover, Mark ¹. (1-Utah Department of Natural Resources, Division of Wildlife Resources).

17:00-18:30 BUSINESS MEETING

18:30-Open BANQUET

Saturday 20 November 2010

GENERAL SESSION 5: Moderator-- Jeanette Haegele

08:30 DESERT FISHES RESEARCH AND MANAGEMENT IN TEXAS DURING 2010

Garrett, Gary ¹, Edwards, Robert ², Allan, Nathan ³. (1-Texas Parks & Wildlife Dept., 2-University of Texas - Pan Am, 3-US Fish & Wildlife Service).

08:45 The Fishes of Texas Project – status of compilation, standardization and utilization of museum-vouchered fish collection data / El Proyecto “Peces de Texas” – estado actual de recopilación, normalización y aplicación de registros en museos de colectas de peces

Hendrickson, Dean A. ¹, Cohen, Adam E. ¹, Labay, Benjamin ¹, Sarkar, Sahotra ², Sissel, Blake ². (1-University of Texas at Austin, Texas Natural History Collection, 2-University of Texas at Austin, Section of Integrative Biology).

09:00 Invasive snails and desiccation – a potential control measure?

Rogowski, David ¹. (1-Texas Tech University, Dept. Nat. Resources Mgt).

09:15 Genetic effective size and fragmentation of the threatened Leopard Darter, *Percina pantherina*

Schwemm, Michael R. ¹, Echelle, Anthony A. ¹, Van Den Bussche, Ronald A. ¹. (1-Oklahoma State University, Department of Zoology).

09:30 Population dynamics of *Gambusia nobilis* and *Cyprinodon elegans* in San Solomon Cienega, Balmorhae State Park, Texas

Deluane, Kelbi ¹, Deaton, Raelynn ¹, Garrett, Gary ², Hargrave, Chad ¹. (1-Department of Biological Sciences, Sam Houston State University, 2-Texas Parks and Wildlife, Inland Fisheries).

09:45 Food Web Structure and Potential Community-level interactions in a reconstructed desert wetland, San Solomon Ciénega, Balmorhae State Park, Texas

Hamontree, Sam ¹, Garrett, Gary ², Deaton, Raelynn ¹, Hargrave, Chad ¹. (1-Department of Biological Sciences, Sam Houston State University, 2-Texas Parks and Wildlife, Inland Fisheries).

10:00 Geomorphic Transformation of In-stream and Riparian Habitat on the Rio Grande in the Big Bend Region

Dean, David J ¹, Schmidt, John C ¹. (1-Intermountain Center for River Rehabilitation and Restoration, Utah State University).

10:15 Towards a Rationale Basis for Planning Rehabilitation of Lost Aquatic Habitats of in the Rio Grande and Colorado River Watersheds

Schmidt, John C. ¹. (1-Utah State University).

10:30 Native fish conservation and management in the upper/middle Rio Grande, Pecos River, Canadian River, Tularosa and Guzman basins, New Mexico during 2010.

Remshardt, W. Jason ¹, Davenport, Stephen R. ¹, Dudley, Robert K. ², Platania, Steven P. ², Propst, David L. ³. (1-U.S. Fish and Wildlife Service, 2-American Southwest Ichthyological Researchers, 3-New Mexico Department of Game and Fish).

Saturday 20 November 2010 (continued)

10:45 Ecology of rapid replacement—Rio Grande silvery minnow vs. plains minnow—middle Pecos River, New Mexico

Hoagstrom, Christopher W. ¹, Zymonas, Nikolas D. ², Davenport, Stephen R. ³, Propst, David L. ², Brooks, James E. ³. (1-Weber State University, Department of Zoology, 2-New Mexico Department of Game and Fishes, Conservation Services Division, 3-U.S. Fish & Wildlife Service, New Mexico Fish and Wildlife Conservation Office).

11:00 Does Trophic or Life-History Theory Predict Fish Biomass-Primary Production Relationships in the upper Gila River, NM, USA?

Whitney, James E. ¹, Gido, Keith B. ¹. (1-Kansas State University, Division of Biology).

11:15 Genetic effective size, Ne, tracks density in a small freshwater cyprinid, Pecos bluntnose shiner (*Notropis simus pecosensis*).

Osborne, Megan J. ¹, Davenport, Stephen R. ², Hoagstrom, Christopher W. ³, Turner, Thomas F. ¹. (1-University of New Mexico, 2-U.S Fish and Wildlife Service, 3-Weber State University).

11:30 Comparative Population Genetics of Two Gila River Cyprinids

Pilger, Tyler, J. ¹, Turner, Thomas, F. ¹. (1-University of New Mexico, Department of Biology).

11:45 Genetic diversity of non-native fishes exceeds natives in the Pecos River, NM

Diver, Tracy ¹, Osborne, Megan ¹, Turner, Thomas ¹. (1-University of New Mexico Department of Biology).

12:00-13:00 LUNCH

GENERAL SESSION 6: Moderator— Brandon Albrecht

13:00 2010 Area report for Nevada

Weissenfluh, Darrick ¹, Miscow, Eric ², Hobbs, Brian ³, Sjoberg, Jon ³, Byrne, Cody ³, Petersen, Jeff ³, Pepper, Mark ⁴. (1-U.S. Fish and Wildlife Service, 2-Nevada Natural Heritage Program, 3-Nevada Department of Wildlife, 4-Great Basin National Park).

13:15 Lake Mead razorback sucker recruitment, population trends, and relationships to recovery

Albrecht, Brandon ¹, Holden, Paul ¹, Kegerries, Ron ¹, Rogers, Ron ¹. (1-Bio-West, Inc. Fisheries Section).

13:30 Razorback sucker at the Colorado inflow of Lake Mead: lessons from the past and looking to the future

Kegerries, Ron ¹, Albrecht, Brandon ¹, Holden, Paul ¹. (1-Bio-West, Inc. Fisheries Section).

13:45 Conservation genetics of Lahontan tui chubs in Walker Lake, Nevada

Finger, Amanda J ¹, May, Bernie ¹. (1-University of California, Davis).

14:00 Unexpected benefits of the July 2010 Warm Springs wildfire for recovery actions for the endangered Moapa dace, *Moapa coriacea*.

Syzdek, David J. ¹, Hobbs, Brian M. ². (1-Southern Nevada Water Authority, 2-Nevada Department of Wildlife).

Saturday 20 November 2010 (continued)

14:15 Genetic Status of San Felipe Gambusia

Echelle, Anthony A. ¹, McClure-Baker, Sherri ², Lozano-Vilano, Lourdes ³, Garrett, Gary P. ⁴, Edwards, Robert ⁵. (1-Oklahoma State University, 2-Dexter National Fish Hatchery and Technology Center, 3-Universidad Autonoma de Nuevo Leon, 4-Texas Parks and Wildlife Department, 5-The University of Texas-Pan American).

14:30 Evaluation of an artificial refuge designed to conserve multiple thermophilic aquatic species.

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

14:45 Evaluating the genetic purity of relict dace populations in the central Great Basin

Houston, Derek D. ¹, Evans, R. Paul, Shiozawa, Dennis K. . (1-Brigham Young University, Department of Biology, 2-Brigham Young University, Department of Microbiology & Molecular Biology, 3-Brigham Young University, Department of Biology).

15:00 The use of backwaters and the conservation plan for native fishes of the lower Colorado River

Kesner, Brian R. ¹, Marsh, Paul C. ¹, Dowling, Tom ². (1-Marsh & Associates, 2-Arizona State University).

GENERAL SESSION 7: Moderator—Trina Hedrick

15:15 Status and management of the native fishes of the Upper Colorado Basin

Hedrick, Trina N. ¹, Brandenburg, W. Howard ², Farrington, Michael A. ². (1-Utah Division of Wildlife Resources, 2-American Southwest Ichthyological Resources, L.L.C.).

15:30 Effects of a Single Grazing Event by Cattle on Terrestrial Invertebrates Falling Into Streams and Trout Populations: Results of a Field Experiment

Saunders, W. Carl ¹, Fausch, Kurt D. ². (1-Utah State University, 2-Colorado State University).

15:45 Greenback Cutthroat Trout in the Colorado River Basin: The original homestead?

Evans, R. Paul ¹, Shiozawa, Dennis K. ², Unmack, Peter ², Mathis, Jason ². (1-Department of Microbiology and Molecular Biology, Brigham Young University, 2-Department of Biology, Brigham Young University).

16:00 Restoring the San Rafael River

Breidinger, Kenneth ¹. (1-Utah Division of Wildlife).

16:15 Long-distance movements by Flannelmouth Sucker in big river habitats

Breen, Matthew J. ¹, Hedrick, Trina N. . (1-Utah Division of Wildlife Resources).

16:30 The Changing Geomorphic Template of Native Fish Habitat of the Lower San Rafael River, Utah

Fortney, Stephen ¹, Dean, David J. ¹, Schmidt, John C. ¹. (1-Intermountain Center for River Rehabilitation and Restoration Department of Watershed Sciences Utah State University Logan, UT 84322-5210).

16:45 Population Estimate of Humpback Chub, *Gila cypha*, and Roundtail Chub, *Gila robusta*, in Westwater Canyon, Colorado River, Utah, USA, 2007-2008

Elverud, Darek ¹. (1-Utah Division of Wildlife Resources).