



## DESERT FISHES COUNCIL MEETING PROGRAM



**Thursday November 20**

**8:45 AM** – E. Phil Pister\*<sup>1</sup> and J.T. Reynolds\*<sup>2</sup> (1 Desert Fishes Council, 2 Superintendent, Death Valley N.P.) **Introduction**

### *Area Reports – Moderator Sally Stefferud*

**9:00 AM** - Sally E. Stefferud\*<sup>1</sup>, Paul Barrett<sup>2</sup>, Robert W. Clarkson<sup>3</sup>, Paul C. Marsh<sup>4</sup>, J. Milosovich<sup>5</sup>, David L. Propst<sup>6</sup>, Pam J. Sponholtz<sup>7</sup> and others (1 Unaffiliated, 2 U.S. Fish and Wildlife Service, 3 U.S. Bureau of Reclamation, 4 Arizona State University, 5 California Department of Fish and Game, 6 New Mexico Game and Fish Department, 7 U.S. Fish and Wildlife Service) **Lower Colorado River Area Report**

**9:15 AM** - James Brooks\*<sup>1</sup>, David Propst<sup>2</sup>, Robert Dudley<sup>3</sup>, Steven Platania<sup>3</sup>, Tom Turner<sup>3</sup>, Jason Remshardt<sup>1</sup>, Steve Davenport<sup>1</sup>, Manuel Ulibarri<sup>1</sup> (1 U.S. Fish and Wildlife Service, 2 New Mexico Department of Game and Fish, 3 University of New Mexico, 4 University of New Mexico, 5 University of New Mexico, 6 U.S. Fish and Wildlife Service, 7 U.S. Fish and Wildlife Service, 8 U.S. Fish and Wildlife Service) **Native fish research and management in the upper/middle Rio Grande Basin, 2003**

**9:30 AM** - Matthew E. Andersen\*<sup>1</sup>, Peggy A. Miller<sup>1</sup> (Utah Division of Wildlife Resources) **Bonneville Basin Area Report**

**9:45 AM** - Nathan L. Allan\*<sup>1</sup>, Gary P. Garrett<sup>2</sup>, Robert J. Edwards<sup>3</sup>, Clark Hubbs<sup>4</sup> (1 U.S. Fish and Wildlife Service, Austin Field Office, 2 Texas Parks and Wildlife Department, HOH Fisheries Research Center, 3 University of Texas-Pan American, Department of Biology, 4 University of Texas at Austin, Section of Integrated Biology) **Texas Area Report: Desert Fishes research and management in Texas during 2003**

**10:00 AM** - Alejandro Varela-Romero<sup>1</sup>, Gorgonio Ruíz-Campos<sup>2</sup>, Heidi Blasius\*<sup>3</sup> (1 DICTUS/Universidad de Sonora, Hermosillo, Sonora, 2 Facultad de Ciencias, Universidad Autónoma de Baja California, Ensenada, México, 3 BLM, Safford, AZ) **2003 advances in the study and conservation of native fishes in Northwest Mexico**

**10:15 AM** - Tim Modde<sup>1</sup>, Frank Pfeifer\*<sup>1</sup>, Robert Muth<sup>1</sup>, Charles McAda<sup>1</sup>, Dale Ryden<sup>1</sup> (U.S. Fish and Wildlife Service) **Upper Colorado River basin Area Report**

**10:30 AM** - Salvador Contreras-Balderas\*<sup>1</sup> (Bioconservación, A.C., Monterrey, N.L., México) **National and Northeast Mexico Area Report**

**10:45 AM** - Rollie White\*<sup>1</sup>, Stewart Reid<sup>2</sup>, Doug Young<sup>1</sup>, Jeannine Rossa<sup>3</sup> (1 Oregon Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2 Klamath Falls Fish and Wildlife Office, U.S. Fish and Wildlife Service, 3 Ashland (Oregon) Resource Area, Bureau of Land Management) **2003 Oregon Area Report**

**11:00 AM** - Steve Parmenter\*<sup>1</sup>, Dawne Becker<sup>1</sup>, Derham Giuliani<sup>2</sup>, Eddy Konno<sup>1</sup>, Terry Russi<sup>3</sup>, Susan Williams<sup>4</sup> (1 California Department of Fish and Game, 2 none, 3 Bureau of Land Management, 4 Epsilon Systems Solutions, Inc.) **California Area Report**

**11:15 AM** - Shawn C. Goodchild\*<sup>1</sup>, Anita E. Cook<sup>2</sup>, Cynthia T. Martinez<sup>1</sup>, Glenn Clemmer<sup>3</sup>, Ross Haley<sup>4</sup>, Jim Heinrich<sup>5</sup>, Brian Hobbs<sup>5</sup>, John Hutchings<sup>5</sup> (1 U.S. Fish and Wildlife Service, Southern Nevada Field Office, 2 Nevada Department of Wildlife, Fisheries Bureau, 3 Nevada Natural Heritage Program, 4 National Park Service, Lake Mead National Recreation Area, 5 Nevada Department of Wildlife, Southern Region) **2003 Nevada Area Report**





*Devils Hole – Moderator Eric Gustafson*

**11:30 AM** - Alan C. Riggs\*<sup>1</sup> (US Geological Survey) **Devils Hole, cradle of the Desert Fishes Council**

**12:00 PM LUNCH / ALMUERZO**

**2:00 PM** - James E. Deacon\*<sup>1</sup> (University of Nevada Las Vegas, Departments of Environmental Studies and Biology) **Devil's Hole: this magical place**

*Contributed Papers 1 – Moderator Marlis R. Douglas*

**2:30 PM** - Javier Madoz<sup>1</sup>, Steve Parmenter<sup>2</sup>, Pedro M. Leunda\*<sup>1</sup>, Arturo H. Ariño<sup>1</sup>, Rafael Miranda<sup>1</sup> (1 Dept. Zoology & Ecology, University of Navarra, 2 Dept. of Fish and Game, Eastern Sierra Inland Deserts Region) **Morphometric analysis of scales of the Owens River basin *Gila bicolor* populations**

**2:45 PM** - Yongjiu Chen\*<sup>1</sup>, Steve Parmenter, Bernie May (1 Department of Animal Science, UC Davis, 2 California Department of Fish and Game) **Introgressive hybridization and genetic differentiation of endangered Owens tui chub populations** (Best student paper award competitor)

**3:00 PM** - Anthony T. Robinson\*<sup>1</sup>, Joe E. Slaughter<sup>1</sup>, Marianne, E. Meding<sup>1</sup> (Arizona Game and Fish Department) **Rodeo-Chediski fire reduces nonative fish population in the Salt River**

**3:15 PM** - Craig A. Stockwell\*<sup>1</sup>, David B. Layfield<sup>1</sup> (North Dakota State University, Department of Biological Sciences) **Genetic re-evaluation of population structure in the White Sands pupfish, with the use of microsatellite markers**

**3:30 PM** - Margaret A. Matter\*<sup>1</sup> (Ph.D. Candidate, Department of Civil Engineering, Colorado State University, Fort Collins, CO.) **A physically-based approach to characterizing snowmelt hydrographs**

**3:45 PM** - David D. Oakey<sup>1</sup>, Michael E. Douglas\*<sup>2</sup>, Marlis R. Douglas<sup>2</sup> (1 Arizona State University, Department of Biology, 2 Colorado State University, Dept. Fish. & Wildl. Biology) **A small fish in a large landscape: Evolution of *Rhinichthys osculus* in the American West**

**4:00 PM** - Marlis R. Douglas\*<sup>1</sup>, Patrick C. Brunner<sup>2</sup>, Michael E. Douglas<sup>1</sup> (1 Colorado State University, Dept. Fish. & Wildl. Biology, 2 Swiss Federal Research Station, Waedenswil) **Drought in an evolutionary context: Molecular variability in flannelmouth sucker (*Catostomus latipinnis*) in the Colorado River basin**

**4:15 PM** - Maria de Lourdes Lozano-Vilano<sup>1</sup>, Armando J. Contreras-Balderas\*<sup>1</sup>, Maria Elena García-Ramírez<sup>1</sup> (Lab. Ictiología, Facultad de Ciencias Biológicas, Universidad Autónoma de Nuevo León, Ap. Postal 425. San Nicolás de los Garza, Nuevo León, México. 66450) **Control of jewelfish (*Hemichromis guttatus* Gunther, 1862) in Poza Churince, Cuatro Ciénegas, Coahuila, México**

**4:30 PM** - Maria de Lourdes Lozano-Vilano\*<sup>1</sup>, Armando J. Contreras-Balderas<sup>1</sup> (Lab. Ictiología, Facultad de Ciencias Biológicas, Universidad Autónoma de Nuevo León, Ap. Postal 425. San Nicolás de los Garza, Nuevo León, México. 66450) **Current status of Sandia Pluvial Lake, Aramberri, Nuevo León, México**

**4:45 PM** - Michael R. Schwemm\*<sup>1</sup>, Thomas E. Dowling<sup>1</sup> (Arizona State University, School of Life Sciences) **Population genetics of the genus *Gila* in the Bill Williams and Gila River drainages, Arizona**





**5:00 PM DINNER / CENA**

***Minckley/Deacon Symposium 1 – Moderators Walter Courtenay & Thomas Dowling***

**8:30 PM - Phil Pister\*<sup>1</sup> (Desrt Fishes Council) A Brief History of the Desert Fishes Council**

**9:00 PM - James E. Deacon\*<sup>1</sup>, James Collins, Patricia Minckley (1 University of Nevada Las Vegas, Departments of Environmental Studies and Biology, 2 Arizona State University, Department of Zoology) W. L. Minckley: scholar, mentor, friend**

**9:30 PM - Cindy Deacon Williams\*<sup>1</sup>, Jack E. Williams<sup>2</sup>, Donald W. Sada<sup>3</sup> (1 Unaffiliated, 2 The AuCoin Institute, Southern Oregon University, 3 Desert Research Institute, Reno, NV) James E. Deacon: scholar and advocate for desert fishes**

**Friday November 21**

***Posters – Moderator E. Phil Pister***

**8:30 AM - Anthony Spitzack\*<sup>1</sup>, Marv Lutnesky<sup>1</sup> (Eastern New Mexico University, Department of Biology) The effects of gender, predation risk and sexual selection on depth choice in the mosquitofish, *Gambusia affinis***

**8:30 AM - Maria Elena Garcia-Ramirez\*<sup>1</sup>, Maria de Lourdes Lozano-Vilano<sup>1</sup> (Lab. Ictiología, Facultad de Ciencias Biológicas, Universidad Autónoma de Nuevo León, Ap. Postal 425. San Nicolás de los Garza, Nuevo León, México. 66450) Status and distribution of fishes in selected areas of the Cuatro Ciénegas Valley, Coahuila, México**

**8:30 AM - Nathan L. Allan<sup>1</sup>, Matthew E. Andersen<sup>2</sup>, Jim Brooks<sup>1</sup>, Yvette Converse<sup>1</sup>, Anita Cook<sup>3</sup>, Robert J. Edwards<sup>4</sup>, Gary P. Garrett<sup>5</sup>, Clark Hubbs<sup>6</sup> (1 U.S. Fish and Wildlife Service, 2 Utah Department of Natural Resources, 3 Nevada Department of Wildlife, 4 University of Texas-Pan American, 5 Texas Parks and Wildlife Department, 6 University of Texas) Desert Fishes Council 2002 species status tracking tables**

**8:30 AM - David L. Ward\*<sup>1</sup> (Arizona Game and Fish Department, Research Branch) Analysis of PIT tag data from bluehead suckers (*Catostomus discobolus*) in the Little Colorado River in Grand Canyon, 1991-2003**

**8:30 AM - Sean C. Lema\*<sup>1</sup>, Gabrielle A. Nevitt<sup>1</sup> (University of California, Davis, Section of Neurobiology, Physiology and Behavior) Evidence of a hormonal basis for behavioral variation among Death Valley pupfishes**

**8:30 AM - Jayne Brim Box\*<sup>1</sup>, Jeff Kershner (US Forest Service, National Aquatic Monitoring Center) Freshwater mollusks of the Western United States: where are we today, and where are we going?**

**8:30 AM - Carmen L. Bailey\*<sup>1</sup>, Richard A. Fridell<sup>1</sup>, Kevin K. Wheeler<sup>1</sup> (Utah Division of Wildlife Resources) Effects of drought on least chub (*Iotichthys plegethontis*)**

**8:30 AM - Anna L. George\*<sup>1</sup>, Francisco García de León<sup>2</sup>, George K. Sage<sup>3</sup>, Richard L. Mayden<sup>1</sup>, Joseph R. Tomelleri<sup>4</sup>, Dean A. Hendrickson<sup>5</sup>, Bernard R. Kuhajda<sup>6</sup>, Héctor Espinosa<sup>7</sup>, Lloyd Findley<sup>8</sup>, Jennifer Nielsen<sup>3</sup>, Gorgonio R. Campos<sup>9</sup>, Faustino Camarena<sup>9</sup> (1 Saint Louis University, 2 Instituto Tecnológico de Ciudad Victoria, 3 USGS-BRD, Alaska Biological Science Center, 4 American Fishes, 5 Texas Memorial Museum, University of Texas at Austin, 6 University of Alabama, 7 Universidad Nacional Autónoma de México, 8 CIAD, Unidad Guaymas, 9 Universidad Autónoma de Baja California) Genetic diversity in native and introduced Mexican trout species**





## DESERT FISHES COUNCIL MEETING PROGRAM



- 8:30 AM** - Dean W. Blinn<sup>1</sup>, Douglas L. Threlhoff<sup>\*2</sup> (1 Northern Arizona University, Flagstaff, AZ, 2 private consultant, Ventura, CA) **A long-term ecosystem monitoring protocol for Devils Hole, Nevada**
- 8:30 AM** - Andrew A. Schultz<sup>\*1</sup>, O. Eugene Maughan<sup>1</sup>, Scott A. Bonar<sup>1</sup>, William J. Matter<sup>2</sup> (1 Arizona Cooperative Fish and Wildlife Research Unit, United States Geological Survey, University of Arizona, 104 Biosciences East, Tucson, Arizona 85721, USA, 2 School of Renewable Natural Resources, University of Arizona, 325 Biosciences East, Tucson, Arizona, 85721, USA) **Effects of flooding on abundance of native and nonnative fishes downstream from a small impoundment** (Best student paper award competitor)
- 8:30 AM** - Chuck Schade<sup>\*1</sup>, Scott Bonar<sup>1</sup> (Arizona Cooperative Fish and Wildlife Research Unit) **Factors associated with the presence and abundance of non-native fish species across the western United States** (Best student paper award competitor)
- 8:30 AM** - Jonathan N. Baskin<sup>1</sup>, Thomas R. Haglund<sup>1</sup>, Camm C. Swift<sup>\*2</sup> (1 California State Polytechnic University Pomona, Biological Sciences Department, 2 Entrix Corp) **Santa Ana sucker distribution, biology and interactions with exotic fishes in the middle Santa Ana River, Southern California**
- 8:30 AM** - M. Jane Keleher<sup>\*1</sup>, Russell B. Rader<sup>1</sup> (Brigham Young University, Department of Integrative Biology) **Determining the ecological integrity of isolated desert wetlands in the Bonneville basin**
- 8:30 AM** - Michael D. Mills<sup>\*1</sup>, Mark C. Belk<sup>1</sup>, Russell B. Rader<sup>1</sup> (Brigham Young University, Department of Integrative Biology) **Complex interactions between native and invasive fish: size dependent effects of predation and competition**
- 8:30 AM** - David W. Speas<sup>\*1</sup>, Josh E. Rasmussen<sup>1</sup>, Kristine W. Wilson<sup>1</sup>, Matthew E. Andersen<sup>1</sup> (Utah Division of Wildlife Resources, Aquatics Section) **Recent trends in June sucker spawning and larval drift**
- 8:30 AM** - Cristina E. Velez<sup>\*1</sup>, Laura L. Leslie<sup>2</sup>, Scott A. Bonar<sup>1</sup> (1 University of Arizona, Arizona Cooperative Fish & Wildlife Research Unit, 2 Arizona Game and Fish Department) **Impact of predation by nonnative fishes on native fishes in the Verde River, Arizona** (Best student paper award competitor)
- 8:30 AM** - Nicholas J. Lang<sup>\*1</sup>, Richard L. Mayden<sup>1</sup> (Saint Louis University, Department of Biology) **Molecular systematics of the Southwestern darter group (*Etheostoma*: subgenus *Oligocephalus*)**
- 8:30 AM** - Jill R. Ayala<sup>\*1</sup>, Russell B. Rader<sup>1</sup>, Mark C. Belk<sup>1</sup> (Brigham Young University) **Overlap in the seasonal diel habitat utilization of least chub (*Notichthys phlegethontis*) and mosquitofish (*Gambusia affinis*)**
- 8:30 AM** - Steve Parmenter<sup>\*1</sup>, Genevieve Park<sup>2</sup>, Terry Russi<sup>3</sup> (1 California Department of Fish and Game, 2 Massachusetts Institute of Technology, 3 Bureau of Land Management) **Restoration of BLM Spring, a desert spring overrun by largemouth bass and emergent vegetation**
- 8:30 AM** - Jennifer G. Buntz<sup>\*1</sup> (Eastern New Mexico University, Department of Biology) **Two regimes of exposure to the pesticide Lindane: Differential effects on the Mosquitofish, *Gambusia affinis*** (Best student paper award competitor)
- 8:30 AM** - Tim Modde<sup>\*1</sup> (U.S. Fish and Wildlife Service) **Field application of the 'floodplain reset' approach to enhance survival of bonytail and razorback sucker in the middle Green River, Utah**







## DESERT FISHES COUNCIL MEETING PROGRAM



- 8:30 AM** - Michael R. Childs\*<sup>1</sup> (Arizona Game and Fish Department, Research Branch) **Spawning by loach minnow in the laboratory**
- 8:30 AM** - Michael L. Collyer\*<sup>1</sup>, Craig A. Stockwell<sup>2</sup>, Dean C. Adams<sup>1</sup> (1 Iowa State University, Ecology, Evolution, and Organismal Biology, 2 North Dakota State University, Department of Biological Sciences) **Adaptive morphological divergence of a pupfish species in as little as three decades**
- 8:30 AM** - Gordon A. Mueller\*<sup>1</sup>, Jeanette Carpenter<sup>1</sup>, Chuck Minckley<sup>2</sup>, Paul C. Marsh<sup>3</sup> (1 U.S. Geological Survey, Fort Collins Science Center, 2 U.S. Fish & Wildlife Service, Arizona Fishery Resources Office, Parker, 3 Arizona State University, School of Life Sciences) **Investigations into the early life histories of razorback sucker and bonytail in Cibola High Levee Pond**
- 8:30 AM** - Kara D. Hilwig\*<sup>1</sup>, W. Linn Montgomery<sup>1</sup> (1 Northern Arizona University, Department of Biological Sciences, 2 Northern Arizona University, Department of Biological Sciences) **Suppression of populations and reproduction in a nonnative fish: sensitivity of various life history stages of red shiners to environmental manipulation** (Best student paper award competitor)
- 8:30 AM** - David F. Bradford\*<sup>1</sup>, Anne C. Neale<sup>1</sup>, Maliha S. Nash<sup>1</sup>, Donald W. Sada<sup>2</sup>, Jef R. Jaeger<sup>3</sup> (1 U.S. Environmental Protection Agency, Las Vegas, NV, 2 Desert Research Institute, Reno, NV, 3 University of Nevada - Las Vegas, Department of Biological Sciences) **Metapopulation processes or infinite dispersal? Habitat patch occupancy by toads (*Bufo punctatus*) in a naturally fragmented desert landscape**
- Minckley/Deacon Symposium 2 – Moderators Walter Courtenay & Thomas Dowling*
- 9:45 AM** - Walter R. Courtenay\*<sup>1</sup>, Thomas Dowling\*<sup>2</sup> (1 USGS, Center for Aquatic Resources Studies, 2 Arizona State University, Department of Biology) **Symposium Introduction**
- 10:00 AM** - Donald W. Sada\*<sup>1</sup> (Desert Research Institute, Reno, NV) **Temporal variation in Saratoga Springs pupfish demography and habitat use as illustrated by long term studies between 1966 - 1995**
- 10:15 AM** - James F. LaBounty\*<sup>1</sup> (Retired Aquatic Ecologist) **Environmental determinants of demographic characteristics of Saratoga Springs pupfish**
- 10:30 AM** - Linda Manning\*<sup>1</sup> (National Park Service, Death Valley National Park) **Jim Deacon and Devils Hole**
- 10:45 AM** - Salvador Contreras-Balderas\*<sup>1</sup>, María de Lourdes Lozano-Vilano<sup>1</sup>, María Elena García-Ramírez<sup>1</sup> (Bioconservación, A.C. & UANL Monterrey) **Index of Biological Integrity, Historical Version, of the lower Río Nazas, Coahuila, México: 2002**
- 11:00 AM** - Dean A. Hendrickson\*<sup>1</sup>, Adam E. Cohen<sup>2</sup>, William S. Brown<sup>3</sup>, Lydia Breunig<sup>4</sup>, Benigno Vásquez<sup>5</sup>, Jennifer G. Howeth<sup>6</sup> (1 Texas Memorial Museum and Section of Integrated Biology, University of Texas, Austin, 2 Texas Commission on Environmental Quality, Austin, 3 Dept. Biology, Skidmore College, Saratoga Springs, NY, 4 Geography, University of Arizona, Tucson, 5 Municipio de Cuatro Ciénegas, Coahuila, México, 6 Section of Integrated Biology, University of Texas, Austin) **Big, wet ‘scribbles’ gone dry, and other stories of changing Cuatro Ciénegas habitats: the W.L. Minckley legacy lives, but the battle never ends**
- 11:15 AM** - Evan Carson\*<sup>1</sup>, Thomas E. Dowling<sup>1</sup> (Arizona State University) **Hybridization between *Cyprinodon bifasciatus* and *C. atrorus*: history, patterns, and dynamics**
- 11:30 AM** - Gary P. Garrett\*<sup>1</sup>, Robert J. Edwards<sup>2</sup> (1 HOH Fisheries Science Center, TX Parks & Wildlife Dept, 2 Department of Biology, University of Texas-Pan American) **New species of *Gambusia* from Texas**





## DESERT FISHES COUNCIL MEETING PROGRAM



**11:45 AM** - Paul C. Marsh\*<sup>1</sup>, Carol A. Pacey<sup>1</sup>, Brian R. Kesner<sup>1</sup> (Arizona State University, School of Life Sciences) **W.L. Minckley and the razorback sucker of the lower Colorado River**

### **12:00 PM LUNCH / ALMUERZO**

**2:00 PM** - Thomas E. Dowling\*<sup>1</sup>, Paul C. Marsh<sup>1</sup>, Anne T. Kelsen<sup>1</sup>, C. Alana Tibbets<sup>1</sup> (School of Life Sciences, Arizona State University) **Genetic monitoring and repatriation of razorback sucker (*Xyrauchen texanus*) in Lake Mohave**

**2:15 PM** - Harold M. Tyus\*<sup>1</sup>, Lorraine A. Hawkins<sup>1</sup>, Wendell L. Minckley<sup>2</sup>, David. L. Schultz<sup>3</sup> (1 University of Colorado at Boulder, CO, 2 Arizona State University (Deceased), 3 Nichols State University, Thibodaux, LA) **A comparison of four techniques for aging Colorado pikeminnow**

**2:30 PM** - Nathan L. Allan<sup>1</sup>, John Karges\*<sup>2</sup>, Anthony A. Echelle<sup>3</sup>, Alice F. Echelle<sup>3</sup> (1 U.S. Fish and Wildlife Service, Austin Field Office, 2 The Nature Conservancy, 3 Oklahoma State University, Zoology Department) **Conservation history of Leon Springs pupfish**

**2:45 PM** - William F. Fagan\*<sup>1</sup>, Peter J. Unmack<sup>2</sup> (1 University of Maryland, College Park, Department of Biology, 2 Arizona State University, Department of Biology) **Rarity, fragmentation, and the scale-dependence of extinction risk in desert fishes**

**3:00 PM** - Peter J. Unmack\*<sup>1</sup>, William F. Fagan<sup>2</sup> (1 Life Sciences, Arizona State University, 2 Department of Biology, University of Maryland) **Nonnative fishes in the southwestern USA versus northwestern Mexico: time-lagged invasions as a predictor in desert fish communities**

**3:15 PM** - Stephanie M. Coleman\*<sup>1</sup> (U.S. Fish and Wildlife Service NM Fishery Resource Office) **Non-native invasion: fathead minnow introduction and spread in West Turkey Creek, Arizona**

**3:30 PM** - Robert W. Clarkson\*<sup>1</sup> (U.S. Bureau of Reclamation, Phoenix Area Office) **W.L. Minckley and the Aravaipa Creek fish barriers: History and legacy**

**3:45 PM** - John N. Rinne\*<sup>1</sup>, Cody D. Carter<sup>1</sup>, Dennis Miller<sup>2</sup>, Kara D. Hilwig<sup>3</sup>, Gary B. Snider<sup>4</sup> (1 US. Forest Service, Rocky Mountain Research Station, 2 Western New Mexico University, 3 Northern Arizona University, Department of Biology, 4 Northern Arizona University, School of Forestry) **Wildfire in the Southwestern U.S.A.: Effects on rare, native fishes and their habitats**

**4:00 PM** - Sally E. Stefferud\*<sup>1</sup> (Nonaffiliated) **Fighting the Battle Against Extinction: W.L. Minckley and the Desert Fishes Recovery Team**

**4:15 PM** - Carol A. Pacey\*<sup>1</sup> (Arizona State University, School of Life Sciences) **Everyone on earth wants my opinion: A letter by Dr. W.L. Minckley**

**4:30 PM** - Gordon A. Mueller\*<sup>1</sup> (US Geological Survey, BRD-FORT, Denver, CO) **Out of the ashes, rises a Phoenix**

**4:45 PM** - Jack E. Williams\*<sup>1</sup>, Cindy Deacon Williams<sup>2</sup> (1 The AuCoin Institute, Southern Oregon University, 2 Environmental Consultants, Medford, Oregon) **Recovery of endangered desert fishes: A realistic expectation or merely a lofty goal?**

**5:00 PM DFC BUSINESS MEETING / DFC JUNTA DE NEGOCIOS** including **Proposed Resolution - Relative to the conservation of native fishes in Arizona**

**7:30 PM BARBECUE**





## DESERT FISHES COUNCIL MEETING PROGRAM



Saturday November 22

### *Contributed Papers 2 – Moderator Steve Ross*

- 8:45 AM** - Peter J. Unmack<sup>1</sup>, Glen W. Knowles\*<sup>2</sup>, Michael R. Baltzly<sup>3</sup> (1 School of Life Sciences, Arizona State University, 2 US Fish and Wildlife Service, Arizona Ecological Services Office, 3 Enjoyer of native fish extraordinaire, Tempe, AZ) **Green sunfish impacts on Gila chub, a natural experiment thanks to a waterfall**
- 9:00 AM** - Paul V. Badame\*<sup>1</sup>, J. Michael Hudson<sup>1</sup> (Utah Division of Wildlife) **Population estimates for humpback chub (*Gila cypha*) and roundtail chub (*Gila robusta*) in Westwater Canyon, Colorado River, Utah, 1998-2002**
- 9:15 AM** - Bill Leibfried\*<sup>1</sup>, Lainie Johnstone<sup>1</sup>, Dr. Jeffrey Cross<sup>2</sup> (1 SWCA Environmental Consultants, 2 Grand Canyon National Park) **Brown trout removal in Bright Angel Creek, Grand Canyon National Park: A potential recovery effort for native fishes**
- 9:30 AM** - Julie A. Jackson\*<sup>1</sup>, J. Michael Hudson<sup>1</sup> (Utah Division of Wildlife Resources) **Population estimate for humpback chub (*Gila cypha*) (2001-2003) and long term trend data for *Gila* spp. (1989-2003) in Desolation and Gray canyons on the Green River, Utah**
- 9:45 AM** - Megan J. Osborne\*<sup>1</sup>, Melissa A. Benavides<sup>1</sup>, Dominique Alo<sup>1</sup>, Thomas F. Turner<sup>1</sup> (University of New Mexico, Department of Biology and Museum of Southwestern Biology) **Genetic effects of hatchery propagation in the endangered Rio Grande silvery minnow (*Hybognathus amarus*)**
- 10:00 AM** - W. Jason Remshardt\*<sup>1</sup>, Stephen R. Davenport<sup>1</sup> (U.S. Fish and Wildlife Service, New Mexico Fishery Resources Office) **Augmentation and monitoring of Rio Grande silvery minnow**
- 10:15 AM** - Christopher J. Cantrell\*<sup>1</sup> (Arizona Game and Fish Department, Research Branch) **Apache trout protection evaluation study: Apache trout habitat use**
- 10:30 AM** - Laura Leslie\*<sup>1</sup>, Cristina Velez<sup>1</sup>, Scott A. Bonar<sup>1</sup> (University of Arizona, Cooperative Fish and Wildlife Research Unit) **Diet and consumption rates of native fishes by nonnative fishes in the Verde River, Arizona** (Best student paper award competitor)
- 10:45 AM** - Ann M. Widmer\*<sup>1</sup>, Corissa J. Carveth<sup>1</sup>, Scott A. Bonar<sup>1</sup> (Arizona Cooperative Fish and Wildlife Research Unit, University of Arizona) **Lethal thermal maxima of native and non-native fishes in the San Pedro River, Arizona** (Best student paper award competitor)
- 11:00 AM** - Peter H. Rissler\*<sup>1</sup>, G. Gary Scoppettone<sup>1</sup>, Jim French<sup>2</sup>, Selena Werdon<sup>3</sup> (1 Reno Field Station, Western Fisheries Research Center, Biological Resources Discipline, U.S. Geological Survey, 2 Nevada Department of Wildlife, 3 Nevada Fish and Wildlife Office, U.S. Fish and Wildlife Service) **Native fish status and distribution in Soldier Meadows, Nevada with emphasis on the desert dace**
- 11:15 AM** - Christy McGuire\*<sup>1</sup> (California Department of Fish and Game) **Is the California state fish in trouble?**
- 11:30 AM** - Allison A. Pease\*<sup>1</sup> (University of New Mexico, Department of Biology) **Microhabitat use and spatial distribution of larval and juvenile fishes in the Middle Rio Grande, New Mexico** (Best student paper award competitor)
- 11:45 AM** - Stephen T. Ross\*<sup>2</sup>, Timothy C. Modde<sup>1</sup> (1 University of Southern Mississippi, Department of Biological Sciences, 2 Museum of Southwestern Biology, University of New Mexico, 3 U.S. Fish and Wildlife Service, Vernal, UT) **Age structure and variation in year class strength of the roundtail chub, *Gila robusta* (Cyprinidae), in the Yampa River Canyon, Colorado**





12:00 PM LUNCH / ALMUERZO

## *Contributed Papers 3 – Moderators Tom Turner*

- 2:00 PM** - G. Gary Scoppettone\*<sup>1</sup>, Peter H. Rissler<sup>1</sup>, Donna Withers<sup>2</sup> (1 U.S. Geological Survey, Reno Field Station, 2 U.S. Fish and Wildlife Service, Stillwater National Wildlife Refuge) **Cui-*ui*, an overlooked prey for Pyramid Lake's nesting colony of American white pelican**
- 2:15 PM** - Jerome A. Stefferud\*<sup>1</sup>, Sally E. Stefferud<sup>1</sup> (Non-affiliated) **Systematic investigations of the warm-water fish assemblage in San Pedro River, 1990-2003**
- 2:30 PM** - Gregory R. Moyer\*<sup>1</sup>, Dominique Alò<sup>1</sup>, Megan J. Osborne<sup>1</sup>, Thomas F. Turner<sup>1</sup> (University of New Mexico, Department of Biology) **A comparison of genetic effective population size between the Rio Grande silvery minnow (*Hybognathus amarus*) and the plains minnow (*Hybognathus placitus*)**
- 2:45 PM** - Ron Brunson\*<sup>1</sup>, Kevin Christopherson<sup>1</sup>, Tim Modde<sup>2</sup>, Garn Birchell<sup>1</sup> (1 Utah Division of Wildlife Resources, 2 U. S. Fish and Wildlife Service) **Evaluation of growth and survival of larval razorback suckers (*Xyrauchen texanus*) in a floodplain depression inhabited by nonnative fish in the Green River, Utah**
- 3:00 PM** - Michael E. Golden\*<sup>1</sup>, Paul B. Holden<sup>1</sup>, S. Kirk Dahle<sup>1</sup>, Amber L. Kingsbury<sup>2</sup>, David L. Propst<sup>2</sup>, W. Howard Brandenburg<sup>3</sup>, Mike A. Farrington<sup>3</sup> (1 BIO-WEST, Inc., 2 New Mexico Department of Game and Fish, 3 University of New Mexico, Museum of Southwestern Biology) **Striving for success: Colorado pikeminnow stocking efforts in the San Juan River**
- 3:15 PM** - David Rogowski\*<sup>1</sup>, Craig Stockwell (North Dakota State University) **Effects of two exotics on experimental populations of White Sands pupfish** (Best student paper award competitor)
- 3:30 PM** - David L. Ward\*<sup>1</sup>, Kara D. Hilwig<sup>2</sup> (1 Arizona Game and Fish Department, Research Branch, 2 Northern Arizona University, Department of Biological Science) **Could exercise conditioning increase the success of repatriation programs for Colorado River fishes?**
- 3:45 PM CANCELLATION**
- 4:00 PM** - Thomas F. Turner\*<sup>1</sup>, John P. Wares<sup>1</sup>, Dominique Alo<sup>1</sup> (University of New Mexico, Museum of Southwestern Biology) **Evolution of MHC class I and class II gene loci among closely related trout species in the American southwest**
- 4:15 PM** - Tim L. Welker\*<sup>1</sup>, Paul B. Holden<sup>1</sup> (BIO-WEST, Inc.) **The role of reservoir fluctuations and cover on the recruitment of razorback sucker in Lake Mead**
- 4:30 PM** - Jeremy Voeltz\*<sup>1</sup>, Rob Bettaso<sup>1</sup> (Arizona Game and Fish Department, Native Fish Program) **Status of the Gila topminnow and desert pupfish in Arizona: A five-year summary (1998-2003)**
- 4:45 PM** - Rob Bettaso\*<sup>1</sup>, Jeremy Voeltz<sup>1</sup> (Arizona Game and Fish Department, Native Fish Program) **Gila topminnow and desert pupfish management in Arizona: RIP stands for Recovery Implementation Plan, not rest in peace**

