**Playa Research Symposium**

**Younes Conference Center, Kearney, Nebraska**

**October 26-27, 2022**

**Wednesday, October 26 – Room name: Crystal 1-2**

1:20 – 1:40 - Welcome - Ted LaGrange, Nebraska Game and Parks Commission

1:40 – 2:20 - Connecting Science to Implementation Panel

 Moderator – Anne Bartuszevige, Playa Lakes Joint Venture

Panelists – Matt Hough, Ducks Unlimited; Heather Johnson, Texas Parks and Wildlife; Brad Krohn, U.S. Fish and Wildlife Service

2:20 – 2:40 - Future losses of playa wetlands decrease network structure and connectivity of the Rainwater Basin, Nebraska

*Bram Verheijen*1, Dana M. Varner2, and David A. Haukos3

1 Missouri Cooperative Fish and Wildlife Research Unit, University of Missouri

2 Rainwater Basin Joint Venture

3 U.S. Geological Survey, Kansas Cooperative Fish and Wildlife Research Unit, Kansas State University

2:40 – 3:00 - Projected climate and land use changes drive wetland plant community composition in playas

 Rachel K. Owen1, *Elisabeth B. Webb*2, David A. Haukos3 and Keith W. Goyne4

1University of Missouri, School of Natural Resources

2U.S. Geological Survey, Missouri Cooperative Fish & Wildlife Research Unit University of Missouri

3U.S. Geological Survey, Kansas Cooperative Fish & Wildlife Research Unit Kansas State University

4University of Missouri, School of Natural Resources, Current Address: Department of Forest Resources and Environmental Conservation

3:00 – 3:20 - Evaluating the effects of climate change on wetland densities in the Central Great Plains

 *Dave Londe*1, Craig Davis1, Scott Loss1, and Ellen Robertson1

 1Okalahoma State University

3:20 – 3:40 - Break

3:40 – 4:00 - Neonicotinoid insecticide concentrations in playas and associations with aquatic macroinvertebrate communities

 Travis J. Schepker1, *Elisabeth B. Webb*2, Donald Tillitt3, and Ted LaGrange4

1Missouri Cooperative Fish and Wildlife Research Unit, School of Natural Resources, University of Missouri

2U.S. Geological Survey, Missouri Cooperative Fish and Wildlife Research Unit, Department of Fisheries and Wildlife Sciences, University of Missouri

3U.S. Geological Survey, Columbia Environmental Research Center,

4Nebraska Game and Parks Commission

4:00 – 4:20 - Beyond migration: the role and value of Rainwater Basin wetlands to breeding birds

 *Joel G. Jorgensen*1, Stephen J. Brenner1,2, and Lauren R. Greenwalt1

1Nebraska Game and Parks Commission

2Audubon Nebraska

4:20 – 4:40 - Benefits of playa buffers as bird habitat

 *Adam Behney*1

 1Colorado Parks and Wildlife

4:40 – 5:00 - Discussion and Additional Questions

5:00 – 7:00 - Happy Hour and Documentary Screening Hosted by Ducks Unlimited

Attendees will have an opportunity to view a brand-new “Wetlands of Nebraska” documentary produced by Platte Basin Timelapse. Light appetizers and drinks will be available.

**Thursday, October 27 – Room name: Crystal 1-2**

8:00 – 8:20 - Welcome – Dana Varner, Rainwater Basin Joint Venture

8:20 – 8:40 - Monitoring Great Plains Playas with the Sentinel 2A/B Satellites for Ecological and Hydrological Applications

 *Hannah Tripp1*,2, Erik Crosman2, Brad Johnson2, William Rogers2, and Nathan Howell2

1Georgia Environmental Protection Division

2West Texas A&M University

8:40 – 9:00 - Accounting for Effects of Hydrologic Modification and Intensifying Drought in Playa Restoration

 *Micah T. Russell*1, Jennifer M. Cartwright2, Gail H. Collins3, Ryan A. Long4, & Jan H. Eitel5

1Department of Environment and Sustainability, Western Colorado University

2U.S. Geological Survey, Lower Mississippi-Gulf Water Science Center

3Sheldon-Hart Mountain National Wildlife Refuge Complex, U. S. Fish and Wildlife Service

4Department of Rangeland and Fire Sciences, College of Natural Resources, University of Idaho

5McCall Outdoor Science School, College of Natural Resources, University of Idaho

9:00 – 9:20 - Benefits to Net Farm Income through Precision Agriculture and Preservation of Wetlands

 *Hannah Jones*1

 1Nebraska Game and Parks Commission

9:20 – 10:00 - Discussion and Additional Questions

10:00 – 10:20 - Break

10:20 – 10:40 - Habitat selection by waterfowl during spring migration in the Rainwater Basin region of Nebraska

 *Dana Varner*1

 1Rainwater Basin Joint Venture

10:40 – 11:00 - Habitat Management Plan Implementation and Development of the Inventory and Monitoring Plan for the Wetland Management District

 *Jeff Drahota*1, Kylie Tierney2, Jessica Bolser1, and Orien Richmond3

1Rainwater Basin Wetland Management District, U.S. Fish and Wildlife Service

2Directors Fellowship Program, Simpson College

3Inventory and Monitoring Program, U.S. Fish and Wildlife Service

11:00 – 11:20 - Science to Solutions: Wetland Restoration and Management in Nebraska's Rainwater Basin

 *Cortney Shaefer*1

 1Rainwater Basin Joint Venture

11:20 – 12:00 - Connecting Science to Implementation Panel

Moderator – Anne Bartuszevige, Playa Lakes Joint Venture

Panelists – Jordan Menge, Pheasants Forever; Peyton Burt, Pheasants Forever; Brad Seitz, Nebraska Game and Parks Commission

12:00 – 1:20 - Lunch

1:20 – 2:00 - An Incomplete Overview of Recent Playa Research in Kansas

 *Jude Kastens1,* Debbie Baker1, Don Huggins1, Randy Stotler2, Dana Peterson1, Tony Layzell3

1Kanses Biological Survey, University of Kansas

 2University of Waterloo

 3Department of Geology, University of Kansas

2:00 – 2:20 - Using Drones and Satellites for Near Real-time Playa Wetlands Monitoring and Assessment

 *Zhenghong Tang*1

 1Community and Regional Planning Program, University of Nebraska-Lincoln

2:20 – 2:40 - Examination of Daily and Sub-daily Water Level Changes in Rainwater Basin Wetlands

*Sarah Thompson*1, Erin Haacker1, and Ted LaGrange2

1Department of Earth and Atmospheric Sciences, University of Nebraska – Lincoln

2Nebraska Game and Parks Commission

2:40 – 3:00 - Break

3:00 – 3:20 - Opportunities for Collaborative Conservation through Source Water Protection

 *Tatiana Davila*1

 1Nebraska Department of Environment and Energy

3:20 – 3:40 - Wetland Recharge Project

 *Duane Woodward*1

 1Woodward Hydrology

3:40 – 4:20 - Connecting Science to Implementation Panel

 Moderator – Anne Bartuszevige, Playa Lakes Joint Venture

4:20 – 5:00 - Discussion and Additional Questions



