FINAL AGENDA

Colorado Chapter of The Wildlife Society Annual Conference Pueblo Convention Center Pueblo, Colorado 29 January to 1 February, 2019



Tuesday, January 29, 2019 Pre-Conference workshop SPACE AVAILABLE

Community-based Social Marketing, a five step approach to motivating human behavioral change *Presented by Doug McKenzie-Mohr McKenzie-Mohr and Associates*

<u>10:00 am – 5:00 pm.</u> The one-day introductory workshop provides an introduction to community-based social marketing and how it is being applied to foster sustainable behavior in wildlife conservation. Participants learn the 5 steps of community-based social marketing.



Cost: \$100 for members, \$175 non-members

Wednesday, January 30, 2019 Workshop

Camera Trapping Wo	orkshop
Workshop Organizers: 9:00 am -12:00 pm	Nathan Seward and Chris Mettenbrink Wildlife non-invasive sampling with camera traps in the field Nathan Seward, Colorado Parks and Wildlife Kevin Blecha, Colorado Parks and Wildlife
12:00 pm -1:00 pm	Lunch provided at Pueblo Convention Center
1:00 pm – 5:00 pm	Managing photographs and analyzing camera trap data Jake Ivan, Colorado Parks and Wildlife Eric Odell, Colorado Parks and Wildlife Eric Newkirk, Colorado Parks and Wildlife

Cost: free with meeting registration (workshop limited to 25 people, must preregister) Participants should bring a laptop with software downloaded and warm clothes for the field trip

Wednesday, January 30, 2019 Symposium SPACE AVAILABLE

Great Plains Wildlife Management

Symposium organizers:	John Hughes and April Estep
8:30 am	Welcome and Introductions

8:40 am An Update on Lesser Prairie-chicken reintroduction efforts in Colorado Jonathan Reitz, Colorado Parks and Wildlife

Wednesday, January 30, 2019 Field Trip	
12:00 pm	Lunch provided at Pueblo Convention Center
11:30 am	Questions and discussion
11:10 am	Bird Conservancy of the Rockies conservation efforts in the Great Plains Adam Beh, Bird Conservancy of the Rockies
10:50 am	Cooperative CPW/NRCS/PF Landowner Assistance Programs in Colorado Marina Osier, Natural Resources Conservation Service
10:30 am	Swift fox occupancy surveys in eastern Colorado Marty Stratman, Colorado Parks and Wildlife
10:00 am	Break
9:40 am	An update on sylvatic plague research and management in Colorado Dan Tripp, Colorado Parks and Wildlife
9:20 am	Use of fladry to deter coyote predation on black-footed ferrets Rebecca Much, Colorado State University
9:00 am	Development of pollinator habitat in eastern Colorado Gerry Ohr, Double O Farms

Great Plains Wildlife Management

1:00 -5:00 pm Depart for field trip to Chico Basin Ranch (limited 25, must pre-register)

Wednesday, January 30, 2019 Workshop SPACE AVAILABLE

Writing into the Wild

Dr. John Hausdoerffer, School of Environment and Sustainability, Western Colorado University, Dr. Gavin Van Horn, Director, Cultures of Conservation, The Center for Humans and Nature

1:00 pm – 5:00 pm

Workshop is free and open to all. Registration for this workshop is not necessary.

This workshop will engage participants in a sensory conversation with the wild worlds that flow around and through us. Gavin Van Horn and John Hausdoerffer, walking guides and co-editors of *Wildness: Relations of People and Place*, will lead the group through a series of invitations and writing prompts focused on slowing down, quieting overactive analytic minds, and deepening bodily attention to the wild landscape and other-than-human beings. The purpose of this workshop is to explore the relationship between inner and outer wilds, hone basic tools for attending to our senses, and make use of practical writing exercises that can awaken us to how our own stories are connected to place.

Wednesday January 30, 2019Opening Networking EventCelebration of Public Lands

Celebration of Public Lands Co-Sponsored by Backcountry Hunters and Anglers 6:00 – 10:00 pm



Featured Speaker: President Theodore Roosevelt – Conservation of wildlife and habitat on public lands (Presented by Joe Wiegand, 7 pm)

Colorado Chapter of The Wildlife Society Public lands Position Statement and Public lands testimonials

Backcountry Hunters and Anglers – public lands advocacy

Birds of Prey, Pueblo Raptor Center





Donated beer* and cash bar; Heavy appetizers

*Sponsored by Brues Alehouse, Pueblo, CO

Thursday January 31, 2019 Plenary Session

Graceful Transitions: Understanding factors that motivate human behavioral change to benefit wildlife conservation and communicating science to diverse stakeholders

Organizers: Patrick Magee, Tony Gurzick, and Andrew Don Carlos

8:15 am	Welcome (Patrick Magee, President CCTWS)
8:25 - 9:25 am	Keynote Address Fostering sustainable behaviors using community-based social marketing Doug McKenzie-Mohr, McKenzie-Mohr and Associates
9:25 - 10:10 am	Keynote Address Can wildlife science inform conservation in an era of science skepticism? Dr. Rick Knight, Colorado State University, Professor Emeritus of Wildlife Conservation
10:10 - 10:40 am	Overcoming communication barriers Michelle Roche, Social Impact Brand Advisor//Principal, Roche Brand Advisors
10:40 - 11:00 am	Break

11:00 - 11:30 am	Strategic communication Lauren Truit, Public Information and Website Manager, Colorado Parks and Wildlife
11:30 am -12:00 pm	Improving wildlife conservation outcomes from the inside out: Lessons learned from the National Wildlife Refuge System <i>Natalie Sexton, Human Dimensions Branch Chief, USFWS</i>
12:00 - 1:30 pm	Lunch and Business Meeting (all CCTWS members are invited, free lunch)
1:30 pm	Reconvene for afternoon session
1:40 - 2:00 pm	Case Study 1: America's wildlife values – the social context of wildlife management
	Andrew Don Carlos, Research Associate, Human Dimensions of Natural Resources, Colorado State University
2:00 - 2:20 pm	Case Study 2: "Make it last" campaign Gary Thorson, Assistant Director, Information and Education Branch, Colorado Parks and Wildlife
2:20 - 2:40 pm	Case Study 3: Applying a Community-Based Social Marketing Approach to Understand and Encourage Bear-Proofing Behavior Stacy Lischka, Associate Conservation Scientist, Wildlife Conservation Society
2:40 - 3:00 pm	Case study 4: Storyshed for wildness and biodiversity John Hausdoerffer, Dean of School of Environment and Sustainability, Western Colorado University Gavin Van Horn, Cultures of Conservation, The Center for Humans and Nature
3:00 - 3:25 pm	Break
3:25 - 4:15 pm	 Panel: Graceful Transitions Moderator: Andrew Don Carlos Panel Committee – Andrew Don Carlos, Tony Gurzick, and Patrick Magee Panelists: Doug McKenzie-Mohr, McKenzie-Mohr and Associates Rick Knight, Colorado State University, Professor Emeritus of Wildlife Conservation Stacy Lischka, Associate Conservation Scientist, Wildlife Conservation Society Natalie Sexton, Human Dimensions Branch Chief, USFWS Gavin Van Horn, Cultures of Conservation, The Center for Humans and Nature

Thursday January 31, 2019 IGNITE Session

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4:15 - 5:15 pm	Moderators: Marcella Tarantino and Aran Johnson, CCTWS Board members
	New modeling tools to answer persistent snow-wildlife questions
	Adele K. Reinking, Colorado State University
	Glen E. Liston, Colorado State University
	Stine Hojlund Pedersen, Colorado State University and University of Alaska –
	Anchorage
	Kelly Elder, U. S. Forest Service Rocky Mountain Research Station
	Monitoring for a management and conservation agenda
	Jennifer Timmer, Bird Conservancy of the Rockies
	Can long-distance movements by Greater Sage-Grouse inform management for populations?
	Brett Walker, Colorado Parks and Wildlife
	Brian Holmes, Colorado Parks and Wildlife
	Liza Rossi, Colorado Parks and Wildlife
	Michelle Cowardin, Colorado Parks and Wildlife
	Gunnison Sage-Grouse – Life Beyond the Lawsuit
	Kathy Griffin, Colorado Parks and Wildlife
	Gray Wolf breeding ties observed in Yellowstone National Park
	Lizzie Cato, Yellowstone Wolf Project
	Rick McIntyre, Yellowstone Wolf Project (retired)
	Kira Cassidy, Yellowstone Wolf Project
	Doug Smith, Yellowstone Wolf Project
	Dan Stahler, Yellowstone Wolf Project
	Erin Stahler, Yellowstone Wolf Project
	The Cheatbeer Society
	Patrick Magee!, Western Colorado University
	<i>Eek a bat! Using a One Health approach to communicate about wildlife disease</i> Michelle Verant, National Park Service Biological Resources Division
	Danielle Buttke, National Park Service Biological Resources Division
	Colorado Chapter of The Wildlife Society Awards: A five minute history
	Michelle Cowardin, Colorado Parks and Wildlife

Thursday January 31, 2019

Poster Session, Reception, Banquet, Auction, Awards

5:30 - 6:30 pm

Reception and Poster Session Donated beer and cash bar



The lymphocytes of Mojave desert tortoises may offer novel insights into immune function

Summer Adelbush, Colorado State University – Pueblo *^{Student, graduate} Franziska C. Sandmeier, Colorado State University – Pueblo Max, Sheedy, Colorado State University – Pueblo

The impact of stressors on fitness and conservation behavior in Black-tailed prairie dogs

Stephanie L. Dudley, Colorado State University – Pueblo *^{Student, undergraduate} **Chloe L. Weiter**, Colorado State University – Pueblo *^{Student, undergraduate} Rhett Cuttrell, Fornever Productions, Denver CO Clark D. Jones, U. S. Fish and Wildlife Service Elizabeth K. Peterson, Colorado State University – Pueblo

Testing the effect of the black-tailed prairie dog on herpetological biodiversity at the Pueblo Chemical Depot

Morgan Kester, Colorado State University – Pueblo *^{Student, undergraduate} Delania Klinger, Colorado State University – Pueblo Jason Fender, Colorado State University – Pueblo Jacob Aragon, Colorado State University – Pueblo Elizabeth K. Peterson, Colorado State University – Pueblo Clark D. Jones, U. S. Fish and Wildlife Service Claire W. V. Ramos, Colorado State University – Pueblo Franziska Sandmeier, Colorado State University – Pueblo

Boom and bust cycles of black-tailed prairie dog populations in the Thunder Basin National Grassland, Wyoming Hannah Jacobsen, Colorado State University David Augustine, USDA Agricultural Research Service Ana Davidson, Colorado Natural Heritage Program Gwyn McKee, Great Plains Wildlife Consulting, Inc. Dave Pellatz, Thunder Basin Grasslands Prairie Ecosystem Association Lauren Porensky, USDA Agricultural Research Service

Correlation between vegetation characteristics and Cassin's Sparrow density **N. M. Kauffman,** Colorado State University – Pueblo *^{Student, undergraduate} Claire W. V. Ramos, Colorado State University – Pueblo Clark D. Jones, U. S. Fish and Wildlife Service

Effects of prairie dog colony activity on small mammal diversity and abundance
Adam Liao & Jason Fender, Colorado State University – Pueblo *Student, undergraduate
Clark D. Jones, U. S. Fish and Wildlife Service
Franziska C. Sandmeier, Colorado State University – Pueblo
Elizabeth K. Peterson, Colorado State University – Pueblo
Claire W. V. Ramos, Colorado State University – Pueblo

Do tortoises have immunological memory? **Kiara Olson,** Colorado State University – Pueblo *^{Student, undergraduate} Franziska C. Sandmeier, Colorado State University – Pueblo

The effects of anthropogenic lead on biomagnification in the food chain at the Pueblo Superfund Site **Teyah Schiffer,** Colorado State University – Pueblo *^{Student, undergraduate} Sean Kyle Staples, Colorado State University – Pueblo Clair W. V. Ramos, Colorado State University – Pueblo James Carsella, Colorado State University – Pueblo Moussa Diawara, Colorado State University – Pueblo Elizabeth K. Peterson, Colorado State University – Pueblo

Assessment of feeding habits and summer diet of Oreamnos americanus **Michael Serracino**, Colorado State University – Pueblo *^{Student, undergraduate} Rocky L. Spencer, Colorado State University – Pueblo Brian Vanden Heuvel, Colorado State University – Pueblo

What's all the buzz about? Human behavioral changes and Prairie Rattlesnakes at an urban park

Bryon K. Shipley, Adaptation Environmental Services **Joseph C. Ehrenberger,** Adaptation Environmental Services Mary Ann Bonnell, Jefferson County Open Space Andrew M. DuBois, Jefferson County Open Space

Interspecific transmission of Protostrongylus spp. between mountain goats and bighorn sheep
 Rocky L. Spencer, Colorado State university – Pueblo *Student, undergraduate
 Michael J. Serracino, Colorado State university – Pueblo
 Claire W. V. Ramos, Colorado State university – Pueblo
 Gerald W. Esch, Wake Forest University
 Brian Vanden Heuvel, Colorado State university – Pueblo
 Banquet, awards and auction

6:30 - 10:00 pm Banquet, awards and auction Featuring Keynote Banquet Speaker (8 pm) *Land of the Free* Dr. George Wallace, Colorado State University, Professor Emeritus of Human Dimensions of Natural Resources and Founder of the Center for Protected Area Management and Training

Friday February 1, 2019

8:15 am - 12:00 pm **Contributed papers** Moderators: Marcella Tarantino and Aran Johnson, CCTWS Board members 8:15 - 8:20 am Announcements – Jesse McCarty, CCTWS President 8:20 - 8:40 am NOT a good friend of mine: collaborative bullfrog management along Colorado's Front Range Will Keeley, City of Boulder Open Space and Mountain Parks Kelly Triece, Adaptation Environmental Services Ryan Prioreschi, City of Boulder Open Space and Mountain Parks Chelsea Bebee, Jefferson County Open Space Andrew Dubois, Jefferson County Open Space Joseph Ehrenberger, Adaptation Environmental Services Mac Kobza, Boulder County Parks and Open Space 8:40 - 9:00 am Current status and distribution of Columbian sharp-tailed grouse (Tympanuchus phasianellus columbianus) in Colorado – a story of recent natural and humanmediated range recolonization Brian Holmes, Colorado Parks and Wildlife Michelle Cowardin, Colorado Parks and Wildlife Jeff Yost, Colorado Parks and Wildlife 9:00 - 9:20 am Ponderosa pine forest restoration can benefit avian communities Quresh Latif, Bird Conservancy of the Rockies David Pavlacky, Bird Conservancy of the Rockies Richard Truex, U.S. Forest Service 9:20 - 9:40 am Survival rates and causes of mortality among pre-breeding age Golden Eagles in Northern and Southern High Plains Dale W. Stahlecker, Eagle Environmental, Inc. Brian W. Smith, U. S. Fish and Wildlife Service Robert K. Murphy, U. S. Fish and Wildlife Service Clint W. Boal, Texas Tech University Angela M. Dwyer, Bird Conservancy of the Rockies Joel G. Jorgensen, Nebraska Game and Parks Commission 9:40-10:00 am Quantitative characterization of deer mouse (Peromyscus maniculatus) populations in arid sage-steppe habitat of the Gunnison Basin Taylor Stack* and Patrick Magee, Western Colorado University*Student, undergraduate 10:00 – 10:20 am Break 10:20 – 10:40 am *Is there a correlation between blood mercury level and West Nile Virus* antibodies in Eastern Bluebirds? Claire W. V. Ramos, Colorado State University – Pueblo Alyssa Torres, Colorado State University – Pueblo

Contributed Papers Session

	Jordan Steel, United States Air Force Academy Daniel Cristol, The College of William and Mary
10:40 – 11:00 am	A quantitative PCR assay for the potential turtle pathogen "emydid Mycoplasma" indicates high prevalence in healthy box turtles Franziska C. Sandmeier, Colorado State University-Pueblo Rachel Ruiz, Colorado State University-Pueblo Kendra Leonard, Colorado State University-Pueblo Brandon Bayer, Colorado State University-Pueblo Connor Dowd, Colorado State University-Pueblo Taylor Urban, Colorado State University-Pueblo
11:00 – 11:20 am	Patterns of occupancy and migratory movements of burrowing owls at the Pueblo Chemical Depot Clark D. Jones, U.S. Fish and Wildlife Service, Pueblo Chemical Depot Courtney J. Conway, U.S. Geological Survey - Idaho Cooperative Fish and Wildlife Research Unit Jessica L. Gorski, Colorado State University – Pueblo Claire W. Varian-Ramos, Colorado State University – Pueblo
11:20 am – 11:40 pm	Tracking changes in chronic wasting disease in elk at Rocky Mountain National Park Nathan L. Galloway, National Park Service Biological Resources Division Jenny G. Powers, National Park Service Biological Resources Division Ryan J. Monello, National Park Service Inventory and Monitoring Program Margaret A. Wild, Washington State University
11:40 am – 12:00 pm	The complexity of using biological prioritization for land acquisition in the National Wildlife Refuge System Mindy B. Rice , U.S. Fish and Wildlife Service Keenan Adams, U.S. Fish and Wildlife Service Ken Fowler, U.S. Fish and Wildlife Service
12:00 pm	Student poster and paper awards, photo contest winner
12:10 pm	Conference concludes
12:40 pm	CCTWS Board Meeting, Brues Alehouse

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