

## Agenda, 12<sup>th</sup> Mountain Lion Workshop, May 15–18, 2017, Estes Park, Colorado

### Mon. May 15

- 4:00 p.m.+ Arrival, registration, East Portal & Bible Point rooms, Emerald Mountain Lodge
- 6:00–8:00 Meet & Greet, East Portal & Bible Point rooms, Emerald Mountain Lodge, Dinner 5–7 p.m. in Aspen or Walnut dining rooms

### Tues. May 16

- 8:00 a.m.+ Registration
- 8:00–8:10 Welcome: Craig McLaughlin, Chairman, the 12<sup>th</sup> Mountain Lion Workshop, Colorado Parks & Wildlife
- 8:10–8:40 Keynote address: *Managing Lions: Fandom– Irony– Anachronism*  
Jerry Apker, Carnivore and Furbearer Manager, Colorado Parks & Wildlife
- 8:40–8:45 Brief Break- Stand & stretch
- 8:45 **Session 1: MOUNTAIN LION/FELID POPULATION MONITORING**  
Moderator: Jay Kolbe, Montana Fish, Wildlife & Parks
- 8:45–9:05 *Evaluating noninvasive survey methods for cougars in northwest Wyoming* by Peter Alexander, Eric Gese, Dan Thompson, Mark Elbroch, and Howard Quigley
- 9:05–9:25 *Screaming in the woods: Noninvasive techniques for estimating cougar densities* by Mathew Alldredge and Tasha Blecha
- 9:25–9:45 *A long-term evaluation of biopsy darts and DNA to estimate cougar density: An agency–citizen science collaboration* by Richard Beausoleil, Joseph Clark, and Benjamin Maletzke
- 9:45–10:05 *A multi-method approach to estimating jaguar & puma density: Integration of home range data into a noninvasive genetic sampling approach* by Anthony Giordano
- 10:05–10:20 Break
- 10:20–10:40 *Integrating population monitoring and modeling methods to enable an adaptive harvest management strategy for mountain lions in Montana* by Jay Kolbe, Kelly Proffitt, Josh Nowak, and Hugh Robinson
- 10:40–11:00 *Estimating mountain lion abundance in Arizona 2004–2015* by Frances Peck, April Howard, and Matthew Clement
- 11:00–11:20 *Estimating puma densities from camera trap data using generalized spatial partial identity models* by Christopher Rowe, Ben Augustine, and Marcella Kelly
- 11:20–11:40 *Mule deer abundance, cougar home range size, and predator–prey density across a climatic gradient in the Intermountain West* by David Stoner, Joseph Sexton, Heather Bernales, David Choate, Jyothy Nagol, Kirsten Ironside, Kathleen Longshore, and Thomas Edwards
- 11:40–12:00 *Standardization of cougar population metrics* by Richard Beausoleil
- 12:00–1:00 Lunch– Aspen or Walnut dining rooms
- 1:00–1:40 **Session 2: JURISDICTIONAL MOUNTAIN LION MANAGEMENT SURVEY** by Jerry Apker, Colorado Parks & Wildlife
- 1:40 **Session 3: MOUNTAIN LION GENETICS & GENOMICS**

- Moderator: Holly Earnest, University of Wyoming
- 1:40–2:00 *Interactions between demography, genetics, and landscape connectivity increase extinction for a small mountain lion population in a major metropolitan area* by John Benson, Peter Mahoney, Jeff Sikich, Laurel Serieys, John Pollinger, Holly Earnest, and Seth Riley
- 2:00–2:20 *Genomic assessment of mountain lions within an urbanized landscape* by Roderick Gagne, Patricia Solerno, Daryl Trumbo, Walter Boyce, Winston Vickers, Seth Riley, Sue VandeWoude, Chris Funk, and Holly Earnest
- 2:20–2:40 *Statewide genetic analyses identify mountain lion populations and barriers to gene flow in California and Nevada* by Kyle Gustafson, Walter Boyce, Winston Vickers, Becky Pierce, Vernon Bleich, Marc Kenyon, Seth Riley, Chris Wilmers, Tracy Drezenovich, Roderick Gagne, and Holly Earnest
- 2:40–3:00 *Quality control measures reveal substantial effects of genotyping errors on DNA-based mark-recapture results* by Michael Sawaya, Colby Anton, Mirjam Barrueto, Anthony Clevenger, Howard Quigley, Toni Ruth, Daniel Stahler, and Chris Wilmers
- 3:00–3:20 *Landscape genomics of mountain lions on the rural Western Slope and urban Front Range of Colorado* by Daryl Trumbo, Patricia Solerno, Ken Logan, Mat Alldredge, Kevin Crooks, Sue VandeWoude, and Chris Funk
- 3:20–3:35 Break
- 3:35–4:50 **Panel 1: STAKEHOLDER PERSPECTIVES**  
Moderator: Loren Chase, Arizona Game & Fish
- 4:50–6:00 Dinner 5–7 p.m. in Aspen or Walnut dining rooms
- 6:30–8:30 **Session 4: POSTERS, VENDORS, SOCIAL** in Aspen Glen room, Emerald Mountain Lodge  
Organizer: Stephanie Durno, Colorado Parks & Wildlife

### Wed. May 17

- 8:00 a.m.+ Registration
- 8:00–8:10 Announcements: Craig McLaughlin, Workshop Chairman
- 8:10 **Session 5: MOUNTAIN LION–HUMAN RELATIONSHIPS**  
Moderator: Mathew Alldredge, Colorado Parks & Wildlife
- 8:10–8:30 *Community management of jaguars and pumas: multi-stakeholder processes and methods* by Ronit Amit
- 8:30–8:50 *Puma-human interactions in Brazil: A review of depredation causes and management practices* by Fernando Cesar Cascalli de Azevedo
- 8:50–9:10 *Spatio-temporal and demographic drivers of cougar predation behaviors in an urban–rural gradient* by Kevin Blecha and Mat Alldredge
- 9:10–9:30 *Conducting research and conservation efforts for jaguars and mountain lions on ranchlands in the southwestern U.S.: A model for communication and coordination with the ranching community* by Lisa Haynes, Melanie Culver, Susan Malusa, Kirk Emerson, Aaron Lien, George Ruyle, Laura Lopez Hoffman, Howard Quigley, Rafael

- Hoogesteijn, and Harley Shaw
- 9:30–9:50 *Gaps of knowledge in recovery actions for jaguars (Panthera onca) in Mexico* by Mircea Hidalgo Mihart, Octavio Rosas-Rosas, Rodrigo Nunez Perez, Carlos Lopez Gonzalez, and Diana Friedeberg
- 9:50–10:10 *Social acceptance and Florida panther management– Is there a sweet spot?* by Darrell Land, Kipp Frohlich, and Carol Knox
- 10:10–10:25 Break
- 10:25–10:45 *Landscape and habitat use for a large carnivore in the city: Use and selection for mountain lions around Los Angeles* by Seth Riley, John Benson, and Jeff Sikich
- 10:45–11:05 *Evaluating potential for human and mountain lion conflict in Big Bend National Park* by Price Rumbelow, Patricia Moody Harveson, Louis Harveson, Bert Geary, Catherine Dennison, and Raymond Skiles
- 11:05–11:25 *Conserving mountain lions in southern California: Addressing fragmentation, conflict, and excess human-related mortality in comprehensive and collaborative ways* by Winston Vickers, Kathy Zeller, Trish Smith, Brian Cohen, Holly Earnest, Kyle Gustafson, Patrick Huber, Doug Geremenga, Valarie McFall, Niamh Quinn, Lynn Cullens, Jessica Sanchez, and Walter Boyce
- 11:25–12:25 Lunch– Aspen or Walnut dining rooms
- 12:25–1:40 **Panel 2: HUMAN–LION INTERACTIONS AND CONFLICT & DEPREDATION MANAGEMENT**  
Moderator: Kristin Cannon, Colorado Parks & Wildlife
- 1:40 **Session 6: MOUNTAIN LION HARVEST MANAGEMENT**  
Moderator: Brian Kertson, Washington Department of Fish & Wildlife
- 1:40–2:00 *Impacts on survival of cougars caught as non-targets in foothold traps* by Alyson Andreasen, Carl Lackey, Jon Beckmann
- 2:00–2:20 *Can increased quota harvest redistribute human caused cougar mortality in Alberta?* by Paul Frame
- 2:20–2:40 *Anthropogenic mortality levels shape the characteristics of a lightly hunted cougar population in western Washington* by Brian Kertson
- 2:40–2:55 Break
- 2:55–3:15 *Effects of hunting on a mountain lion population on the Uncompahgre Plateau, Colorado* by Kenneth Logan
- 3:15–3:35 *Mountain lion management in western North America: >100 year retrospective* by Steven Torres, Heather Keough, Justin Dellinger, and Marc Kenyon
- 3:35–3:55 *Evolving mountain lion management in the West: Applying science with human values* by Kenneth Logan
- 3:55 **Session 7: MOUNTAIN LION BIOLOGY & ECOLOGY**  
Moderator: Mark Elbroch, Panthera
- 3:55–4:15 *The role of native prey restoration in reducing livestock depredation by puma (Puma concolor) and jaguar (Panthera onca) in Sonora, Mexico* by Ivonne Cassaigne and Rodrigo Medellin
- 4:15–4:35 *New insight into utilizing bone marrow to assess the health of mountain lion prey* by Jacob Kay and James Cain III

- 4:35–4:55 *Re-colonization of bears in the Great Basin and resulting species interactions: Effects on cougar predation behavior and implications for prey* by Jon Beckmann, Carl Lackey, Pat Jackson, and Alyson Andreasen
- 6:00–8:00 BBQ in the Assembly Hall

Thurs. May 18

- 8:00–8:10 Announcements: Craig McLaughlin, Workshop Chairman
- 8:10 **Session 7 continued: MOUNTAIN LION BIOLOGY & ECOLOGY**  
Moderator: Mark Elbroch, Panthera
- 8:10–8:30 *Scaredy cats and the big bad wolf: How intraguild competition influences home range selection in a subordinate predator* by Anna Kusler, Mark Elbroch, Howard Quigley, and Melissa Grigione
- 8:30–8:50 *Preliminary predation patterns of cougars and wolves in an area of sympatry* by Elizabeth Orning, Katie Dugger, and Darren Clark
- 8:50–9:10 *Foraging behavior of coyotes under intraguild predation risk by cougars: An experimental approach* by Julie Young and Peter Mahoney
- 9:10–9:30 *Spatial ecology and survival of mountain lions on private lands in west Texas* by Catherine Dennison, Patricia Moody Harveson, Bert Geary, and Louis Harveson
- 9:30–9:45 Break
- 9:45–10:05 *Mountain lion social organization* by Mark Elbroch, Michael Levy, Mark Lubell, Howard Quigley, and Anthony Caragiulo
- 10:05–10:25 *Spatial and temporal shifts in cougar presence in the Midwest in response to changing management regimes* by Michelle LaRue, Brent Pease, and Clay Nielsen
- 10:25–10:45 *Retroviral infections among North American mountain lions (Puma concolor)* by Jennifer Malmberg, Simona Kraberger, Elliott Chiu, Justin Lee, Ryan Troyer, Melody Roelke, Mark Cunningham, Winston Vickers, Walter Boyce, Erin Boydston, Laurel Serieys, Seth Riley, Ken Logan, Mat Alldredge, Chris Funk, Kevin Crooks, and Sue VandeWoude
- 10:45–11:05 *Vertebrate diversity benefitting from carrion provided by mountain lions* by Michelle Peziol, Mark Elbroch, Connor O'Malley, and Howard Quigley
- 11:05–11:15 Final remarks: Craig McLaughlin, Workshop Chairman
- 11:15–11:30 Business meeting: Craig McLaughlin, Workshop Chairman  
Choose site for the 13<sup>th</sup> Mountain Lion Workshop in year 2020.
- 11:30 Adjourn