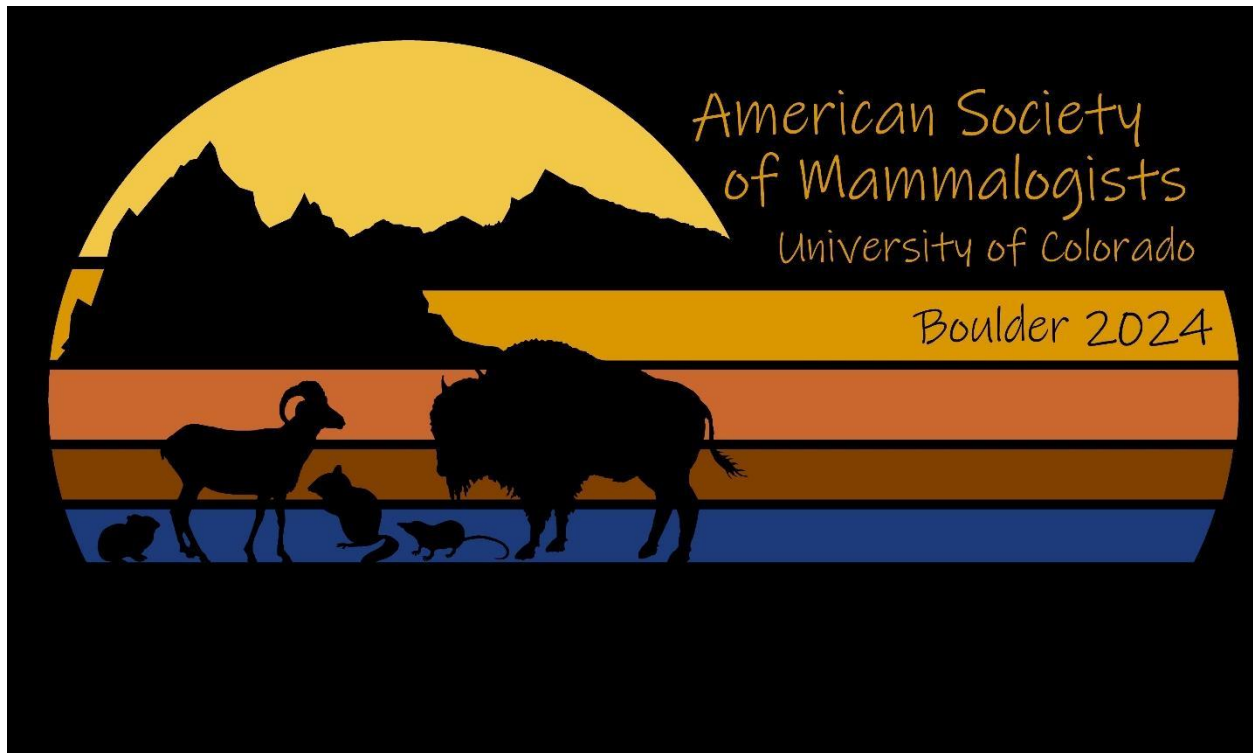


**103rd ANNUAL MEETING
OF THE
AMERICAN SOCIETY OF MAMMALOGISTS
7-11 JUNE 2023**

UNIVERSITY OF COLORADO BOULDER
-BOULDER, COLORADO-



VIRTUAL PROGRAM AND ABSTRACTS



Diamond
Oxford University Press
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www.colorado.edu/cumuseum/

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www.mountainlion.org

Code of Conduct

The 103rd Meeting of the American Society of Mammalogists will adhere to the ASM **Statement of Inclusion** (<http://www.mammalogy.org/asm-statement-inclusion>) and **Code of Conduct** (<http://www.mammalogy.org/committees/office-ombudsperson#tab2>) described below. These statements and policies have been adopted for all ASM activities by the membership and were adopted as presented here by the ASM Board of Directors.

ASM Statement of Inclusion

The American Society of Mammalogists (the Society) prohibits discrimination, harassment, and bullying against any member because of ancestry, color, national origin, marital status, veteran status, gender identity or expression, sexual orientation, race, ethnicity, religion, age, disability, political affiliation or any other characteristic protected by law. The Society expects its employees, volunteers, members and other constituents, when and wherever they are conducting Society business or participating in Society events or activities, to maintain an environment free of discrimination, harassment, bullying, or retaliation.

Discrimination is defined as treating individuals differently – either preferentially or with adverse impact – because they have similar characteristics or because they are from specific groups, unless differential treatment is reasonable, essential, and directly related to conducting Society business or when serving as an official representative of the Society.

American Society of Mammalogists Code of Conduct (Revised June 2023)

The ASM aims to operate in the best interest of the Society and its membership through its policies and procedures. Professional conduct is expected of all ASM members, of any individual representing the ASM, and of all participants in ASM-sponsored activities. We define professional conduct broadly to include respectful and ethical treatment of others. The ASM is dedicated to ensuring the opportunity for active, equal participation in all ASM functions or sponsored activities by all members and participants, regardless of disability, sexual orientation, age, physical appearance, gender, race, national origin, or ethnicity. Discrimination and harassment are prohibited by the ASM; no individual should feel harassed, threatened, or unsafe at any ASM-sponsored activity.

Concerns or allegations of misconduct or harassment should be directed the Office of the Ombudsperson (Erika Barthelmess barthelmess@stlawu.edu, Jessica E. Light jlight2@tamu.edu, Marjorie Matocq mmatocq@unr.edu), or Morty Ortega (morty.ortega@uconn.edu) or reported online

here. Course of action for alleged misconduct may be found here. We note that ASM policies for professional conduct will evolve over time. The most recent version of these policies will be posted on the ASM Ombudspersons website and notifications of updates to the policy will be emailed to all ASM members. All ASM members and participants in ASM-sponsored activities are expected to follow the most recent version of ASM Professional Conduct policies.

Definitions:

Sexual Harassment

Sexual harassment refers to unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature; such behavior debilitates morale and interferes with effective discourse, and therefore will not be tolerated. When unwelcome, behaviors that may constitute sexual harassment include, but are not limited to: sexual flirtations, advances, or propositions; verbal comments or physical actions of a sexual nature; sexually degrading words used to describe an individual; a display of sexually suggestive objects or pictures; sexually explicit jokes; and unnecessary or inappropriate touching. Behavior that is acceptable to one person may not be acceptable to another, so one must use discretion to ensure that words and actions communicate respect for others. This is especially important for those in positions of seniority, as those in more junior positions may be reluctant to express their objections or discomfort regarding unwelcome behavior.

Harassment

Harassment of any participant (attendee, speaker, volunteer, exhibitor, staff member, service provider, organizer, or meeting guest) will not be tolerated. Unacceptable behavior includes (but is not limited to) unwanted verbal attention, unwanted touching, intimidation, stalking, shaming, or bullying (to intimidate, humiliate, frighten, or threaten someone with abusive words or actions). Harassment presented in a joking manner is still harassment and constitutes unacceptable behavior. Retaliation for reporting harassment is also unacceptable, as is reporting an incident in bad faith.

General Guidelines

1. Unprofessional conduct by any ASM member or meeting attendant will not be tolerated and is subject to disciplinary action. Unacceptable behavior includes, but is not limited to: unwanted verbal attention, unwanted touching, intimidation, stalking, shaming or bullying in person or through social media outlets (see additional definitions above), or other disruptive behavior including sustained disruption of talks, events, or meetings. If you experience such behavior, depending on the context and if you feel comfortable, you should let the offender know and tell them to stop and/or seek help from bystanders. Participants asked to stop any harassing behavior are expected to comply immediately. Concerns may also be presented to the Ombudspersons in person (Erika Barthelmess barthelmess@stlawu.edu, Jessica E. Light jlight2@tamu.edu, Marjorie Matocq mmatocq@unr.edu), or Morty Ortega (morty.ortega@uconn.edu) or reported online here. Note that persistent offensive or unwelcome behavior may constitute harassment and that harassment presented in a joking manner is still harassment. Both persistent offensive or unwelcome behavior are subject to disciplinary action within the Society.

2. In all professional activities, ASM members will adhere to ethical standards in the responsible conduct of scientific research and dissemination of results, and in training and education. This includes adhering to all applicable professional standards, laws, regulations, policies and requirements of governmental authorities, funders, and contracts, and adhering to community standards and journal policies regarding grant reviews, authorship, attribution, data availability, the disclosure and resolution or approved management of actual or potential conflicts-of-interest, and service as editor or reviewer.
3. Scientific presentations are expected to adhere to ASM standards of professional conduct and should not include inappropriate and/or graphic images or language that include (but are not limited to) pornography, demeaning or degrading images or language, or gratuitous depictions of violence.
4. Established professionals and all ASM leaders should recognize that they hold positions of power, formal or informal, over students and aspiring professionals. These individuals are expected to lead by example regarding our high standards of professional and personal conduct.
5. All ASM members are potential bystanders to unprofessional or unwelcome behavior. Bystander intervention can prevent, divert, or mitigate harassment. Do not look the other way. See the Resources page for additional information about bystander intervention and training.

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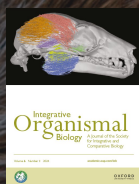
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Schedule at a glance

FRIDAY, JUNE 7TH, 2024		
TIME	EVENT	LOCATION
7:00 am	Registration	UMC Aspen Rooms 285, 287, 289
8:00 am	Board of Directors Meeting I	UMC Room 235
8:00 am	Field Trip: Mammal Elevations	Off-site (transportation provided)
1:45 pm	Field Trip: DMNS	Off-site (no transportation provided)
8:00 am	Workshop V Introduction to R for Mammalogists	UMC 415
9:00 am	Workshop I: Mammal Skins Preparation	MCOL E280
10:00am	Workshop II: Harassment and Assault Prevention in the Field	UMC Room 425
1:00 pm	Workshop III: Active Learning Strategies to Increase Inclusion in the Mammalogy Classroom	UMC Room 417
1:00 pm	Workshop IV: Ultrasonic Bat Recorders	UMC Room 247
7:00 pm	Opening Social	UMC Glenn Miller Ballrooms East & West, UMC Outdoor South Terrace/Tent
SATURDAY, JUNE 8TH, 2024		
TIME	EVENT	LOCATION
7:00 am	Registration	UMC Aspen Rooms 285, 287, 289
8:00 am	Vendor Show	UMC Room 235
8:00 am	Welcome & Announcements	UMC Glenn Miller Center Ballroom
8:15 am	Plenary Session I	UMC Glenn Miller Center Ballroom
9:35 am	Break	UMC Outdoor South Terrace & Tent
10:00 am	Plenary Session I	UMC Glenn Miller Center Ballroom
12:00 pm	Lunch	Own Your Own
12:00 pm	ASM Resolutions Committee Meeting	UMC Room 415
12:00 pm	Officers & Student Plenary Speakers Lunch	UMC Room 425
12:30 pm	ASM Communications/Informatics Committee Meeting	UMC Room 245
12:30 pm	ASM Systematic Collections Committee Meeting	UMC Room 247

12:30 pm	ASM Membership Committee Meeting	UMC Room 382
12:30 pm	ASM Nomenclature Committee Meeting	UMC Room 384
12:30 pm	ASM International Relations Committee Meeting	UMC Room 386
12:30 pm	ASM Public Education Committee Meeting	UMC Room 417
1:30 pm	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West Ballrooms
2:00 pm	ASM Conservation Committee Meeting	UMC Room 382
3:00 pm	ASM Grants-In-Aid Committee Meeting	UMC Room 384
3:00 pm	Break	UMC Outdoor South Terrace & Tent
3:30 pm	Members Meeting I	UMC Glenn Miller Center Ballroom
7:30 pm	Poster Session I and Social	UMC Outdoor South Terrace & Tent
9:00 pm	Auction for Future Mammalogists Fund & Social	UMC Aspen Rooms 285, 287, 289

SUNDAY, JUNE 9TH, 2024

TIME	EVENT	LOCATION
6:30 am	Gordon L. Kirkland Memorial Run for Research	Gathering behind Folsom Field (2150 Stadium Dr), to run on Boulder Creek Trail
7:00 am	Registration	UMC Aspen Rooms 285, 287, 289
8:00 am	Vendor Show	UMC Room 235
8:00 am	Welcome & Announcements	UMC Glenn Miller Center Ballroom
8:15 am	Plenary Session II	UMC Glenn Miller Center Ballroom
10:00 am	ASM Remembers	UMC Room 245
10:30 am	Break	UMC Outdoor South Terrace & Tent
11:00 am	Members Meeting II	UMC Glenn Miller Center Ballroom
12:30 pm	Lunch	On Your Own
12:30 pm	Environmental Consulting Workshop	UMC Room 384
12:30 pm	ASM Resolutions Committee Meeting	UMC Room 417
12:30pm	ASM Honoraria & Travel Awards Committee Meeting	UMC Room 245
12:30 pm	ASM Publications Advisory Committee Meeting	UMC Room 382
1:00 pm	ASM Mammal Images Committee Meeting	UMC Room 415

1:00 pm	Workshop: Disease Workshop (until 6:00pm)	UMC Room 247
2:00 pm	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West Ballrooms
3:30 pm	Break	UMC Outdoor South Terrace & Tent
4:00 pm	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West
6:30 pm	Picnic (until 9:30pm)	BMoCA: 1750 13th Street

MONDAY, JUNE 10TH, 2024

TIME	EVENT	LOCATION
7:00 am	Registration	UMC Aspen Rooms 285, 287, 289
8:00 am	Vendor Show	UMC Room 235
8:00 am	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West Ballrooms
8:00 am	NAPC Meetings (all day)	UMC Room 386
8:00 am	ASM Strategic Planning Committee Meeting	UMC Room 245
9:30 am	Break	UMC Outdoor South Terrace & Tent
10:00 am	Symposium: Before there are none: Montane Mammals and Climate	UMC Glenn Miller Center Ballroom
10:00 am	Technical & Thematic Sessions	UMC Glenn Miller East and West Ballrooms
12:00 pm	Lunch	On Your Own
12:00 pm	Board of Directors Meeting II	UMC Room 247
12:00 pm	Ranges Meeting	UMC Room 245
12:30 pm	ASM Biodiversity Committee Meeting	UMC Room 384
1:30 pm	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West Ballrooms
2:00pm	ASM IDEA Committee Meeting	UMC Room 382
3:00 pm	Break	UMC Outdoor South Terrace & Tent
3:30 pm	Technical & Thematic Sessions	UMC Glenn Miller East and West Ballrooms
3:30 pm	Poster Session II	UMC Outdoor South Terrace & Tent
7:00 pm	Student Social	The Connection (UMC 1 st Floor)

TUESDAY, JUNE 11TH, 2024

TIME	EVENT	LOCATION
7:00 am	Registration	UMC Aspen Rooms 285, 287, 289
8:00 am	Vendor Show	UMC Room 235
8:00 am	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West Ballrooms
8:00 am	NAPC Meetings (all day)	UMC Rooms 384 and 386
10:00 am	Break	UMC Outdoor South Terrace & Tent
10:00 am	Technical & Thematic Sessions	UMC Glenn Miller East and West Ballrooms
12:00 pm	Lunch	On Your Own
12:00 pm	ASM African Research Fellowship Committee Meeting	UMC Room 382
12:00 pm	ASM Program Committee Meeting	UMC Room 247
12:00 pm	ASM Resolutions Committee Meeting	UMC Room 245
1:30 pm	Technical & Thematic Sessions	UMC Glenn Miller Center, East, and West Ballrooms
3:30 pm	Break	UMC Outdoor South Terrace & Tent
4:00 pm	Capstone Session: Dr. Katie Hinde	UMC Glenn Miller Center Ballroom
7:00 pm	Closing Social & Awards Ceremony	Folsom Field (Champions Center Entrance at 2150 Stadium Dr.)

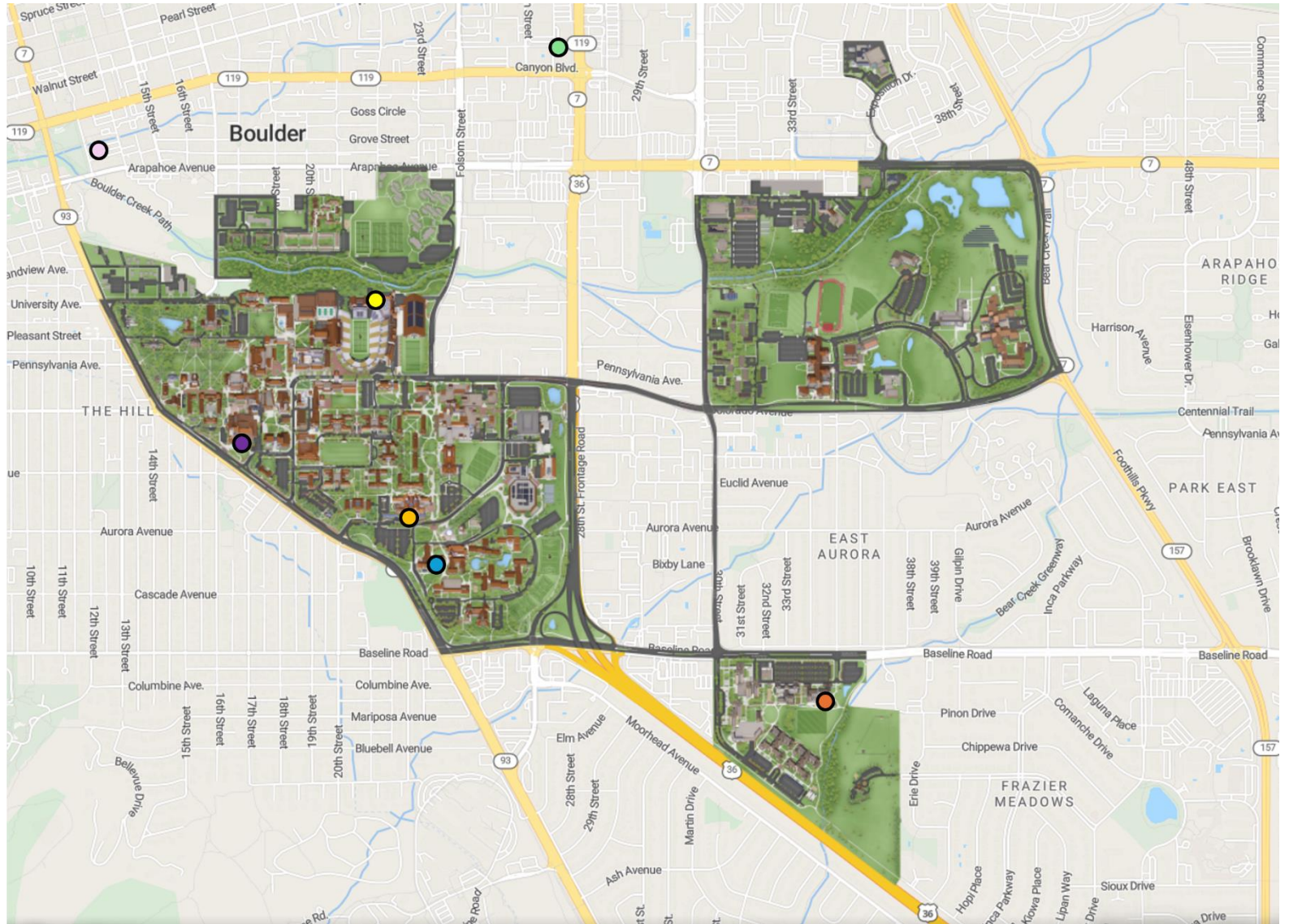
Committee Meetings Alphabetical

Committee	Day	Time	Room
African Research Fellowship	Tuesday June 11	12:00 pm	UMC Room 382
Biodiversity Committee	Monday, June 10	12:30 pm	UMC Room 384
Communications/Informatics Committee	Saturday, June 8	12:00 pm	UMC Room 245
Conservation Committee	Saturday, June 8	2:00 pm	UMC Room 382
Grants-In-Aid Committee	Saturday, June 8	3:00 pm	UMC Room 384
Honoraria & Travel Awards	Sunday, June 9	12:30pm	UMC Room 245
IDEA Committee	Monday, June 10	2:00pm	UMC Room 382
International Relations Committee	Saturday, June 8	12:30 pm	UMC Room 386
Mammal Images Committee	Sunday, June 9	1:00 pm	UMC Room 415
Membership Committee	Saturday, June 8	12:30 pm	UMC Room 382
Nomenclature Committee	Saturday, June 8	12:30 pm	UMC Room 384
Program Committee	Tuesday, June 11	12:00 pm	UMC Room 247
Public Education Committee	Saturday, June 8	12:30 pm	UMC Room 417
Publications Advisory Committee	Sunday, June 9	12:30 pm	UMC Room 382
Resolutions Committee I	Saturday, June 8	12:00 pm	UMC Room 415
Resolutions Committee II	Sunday, June 9	12:30 pm	UMC Room 417
Resolutions Committee III	Tuesday, June 11	12:00 pm	UMC Room 245
Strategic Planning Committee	Monday, June 10	8:00 am	UMC Room 245
Systematic Collections Committee	Saturday, June 8	12:30 pm	UMC Room 247

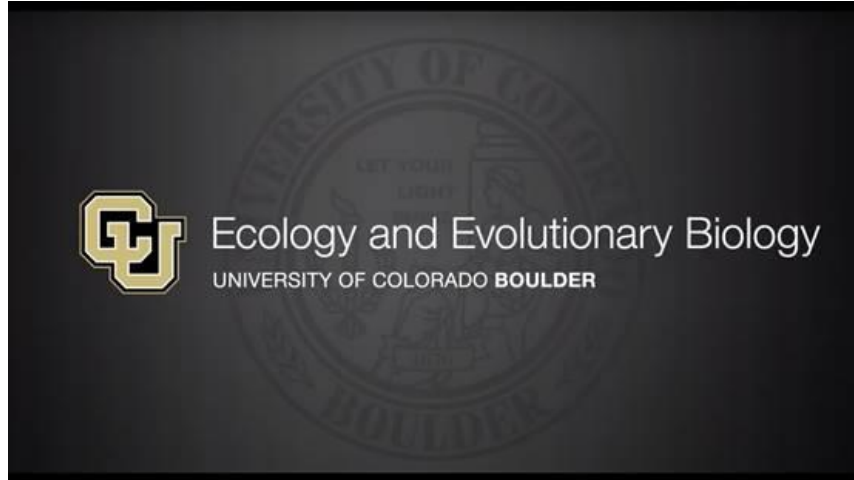
Committee Meetings By Day and Time

Committee	Day	Time	Room
Communications/Informatics Committee	Saturday, June 8	12:00 pm	UMC Room 245
Resolutions Committee I	Saturday, June 8	12:00 pm	UMC Room 415
International Relations Committee	Saturday, June 8	12:30 pm	UMC Room 386
Membership Committee	Saturday, June 8	12:30 pm	UMC Room 382
Nomenclature Committee	Saturday, June 8	12:30 pm	UMC Room 384
Public Education Committee	Saturday, June 8	12:30 pm	UMC Room 417
Systematic Collections Committee	Saturday, June 8	12:30 pm	UMC Room 247
Conservation Committee	Saturday, June 8	2:00 pm	UMC Room 382
Grants-In-Aid Committee	Saturday, June 8	3:00 pm	UMC Room 384
Honoraria & Travel Awards	Sunday, June 9	12:30pm	UMC Room 245
Publications Advisory Committee	Sunday, June 9	12:30 pm	UMC Room 382
Resolutions Committee II	Sunday, June 9	12:30 pm	UMC Room 417
Mammal Images Committee	Sunday, June 9	1:00 pm	UMC Room 415
Strategic Planning Committee	Monday, June 10	8:00 am	UMC Room 245
Biodiversity Committee	Monday, June 10	12:30 pm	UMC Room 384
IDEA Committee	Monday, June 10	2:00pm	UMC Room 382
African Research Fellowship	Tuesday June 11	12:00 pm	UMC Room 382
Program Committee	Tuesday, June 11	12:00 pm	UMC Room 247
Resolutions Committee III	Tuesday, June 11	12:00 pm	UMC Room 245

- UMC
- Folsom Field
- C4C
- Kitt West
- Williams Village
- Hilton Garden Inn
- Boulder Museum of Contemporary Art



A special thanks to Christy McCain, the local committee and our hosts at the University of Colorado Boulder for their financial and logistical support.



Friday June 7, 2024

7:00 AM-5:00 PM	Registration – UMC Aspen Room 285/287/289
8:30 AM-5:00 PM	Board Meeting – UMC 235
8:00 AM- 1:00 PM	Workshop: Introduction to R for Mammalogists – UMC 415
10:00 AM-12:00 PM	Workshop: Harassment and Assault Prevention in the Field – UMC 425
1:00 PM- 4:00 PM	Workshop: Active Learning Strategies to Increase Inclusion in the Mammalogy Classroom – UMC 417
1:00 PM-4:00 PM	Workshop: Ultrasonic Bat Recorders – UMC 247
7:00 PM – 10:00 PM	Opening Social – Outdoor South Terrace and Tent



Saturday June 8, 2024	
7:00 AM-5:00 PM	Registration – UMC Aspen Room 285/287/289
Plenary I Glenn Miller Center Ballroom	
8:00 AM	Welcome
8:15 AM	96. Niche reduction drives extirpation and habitat specialization in an endemic montane chipmunk Hailey Jacobson Annie M. Alexander Award
8:35 AM	4. Characterizing coastal wolf foraging ecology in three Alaska National Parks Ellen Dymit Anna M. Jackson Award
8:55 AM	120. Diversity dynamics in time and space: Insights from historical resurveys of Steens Mountain’s small mammals Jesse Laney A. Brazier Howell Award
9:15 AM	264. Use of genomic tools to investigate the evolutionary history of island spotted skunks Julia Owen-Ramos Elmer C. Birney Award
9:35 AM	Break (Outdoor South Terrace and Tent)
10:00 AM	147. The carnivore community structure of Isle Royale Mauriel Rodriguez Curras Albert R. & Alma Shadle Fellowship
10:40 AM	181. Integrative taxonomic methods in mammalian systematics Connor Burgin ASM Award
11:20 AM	105. Unraveling mammalian diversity in Indonesia: progress, challenges, and approaches Heru Handika Murie Family Conservation Award
12:00 PM	Lunch

Saturday June 8, 2024

Session	Technical Session 1: Conservation I	Technical Session 2: Collections	Technical Session 3: Behavior I
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	James Hallett	Miranda Theriot	Heather Abernathy
1:30 PM	342 Rangewide management and monitoring of an IUCN “green list” species: <i>Dipodomys stephensi</i> <u>Wayne D. Spencer</u>	22 Uncovering a history of our natural history collections: an early-career experience digitizing Californian museum specimens <u>Tokay Alberts, Jacob C Oakman</u>	29 A framework to define and estimate animal diel activity <u>Brian D Gerber</u>
1:45 PM	335 Road mortality of a tropical mammal fauna in Australia’s wet-dry tropics <u>Chris R Pavey</u>	160 From backyard to museum: Assessing recent collecting trends of common local species <u>Miranda K Theriot</u>	52 Effects of a major environmental disturbance on sea otter diets (<i>Enhydra lutris</i>) in Hokkaido, Japan <u>Jackson Johnstone</u>
2:00 PM	305 Principles and standards for the UN Decade on Ecosystem Restoration <u>James G. Hallett</u>	161 Visualizing Mongolian mammal specimens and their parasites through time <u>Litsa T.P. Wooten</u>	80 Responses to heterospecific hawking attack and distress sequences by bats in Saskatchewan <u>Hannah C Wilson</u>
2:15 PM	98 Patrol protections in practice: The effects of anti-poaching strategies on wildlife <u>Matthew H Snider</u>	32 An old database to evaluate the impacts of global change on Mexican terrestrial mammals <u>Lazaro Guevara</u>	180 Dynamic human presence in predator-prey interactions: Leveraging GPS smartphone data to assess competing risks <u>Heather N Abernathy</u>
2:30 PM	9 A meta-analysis of the trends and biases in United States terrestrial mammal research since 1900 <u>Taylor S Readyhough</u>	199 <i>Sylvilagus floridanus</i> and the invasion of the Neotropics by cottontails, <i>Sylvilagus</i> (Lagomorpha: Leporidae) <u>Luis A. Ruedas</u>	194 Forage-risk tradeoffs by mule deer across heterogeneous landscapes in Nebraska <u>Rachel M Stein</u>
2:45 PM	196 Population-level effects of anticoagulant rodenticide exposure in a southeastern carnivore <u>Meghan P Keating</u>		217 In the right place at the right time: spatiotemporal coexistence between competing carnivores in Yellowstone <u>Zoe Lowe</u>
3:00 PM	BREAK – Outdoor Terrace and Tent		
3:30 PM	Members Meeting I – UMC Center Ballroom		
5:30 PM	Free		
6:30 PM	Social and Poster Session I – Outdoor Terrace and Tent (posters on next page)		
8:30 PM	Auction Social – UMC Aspen Room 285/287/289 (ends 10:30)		

Poster Number	Abstract Number	Title	Presenter
1	208	Why do ASM members not return and what can we do about it?	Elmer J Finck
3	41	Anything but another essay: Understanding undergraduate STEM student perceptions of creative, project-based learning	Emily M Redding
5	61	Effective Use of Digital Media to Increase Engagement Across a Networked CURE Community	Annalise Holte
7	183	Social-ecological systems of human-bear interactions	Taylor R Peltier
9	209	Occupancy of pygmy rabbits in Idaho and Montana: modeling distribution and vulnerability to climate change	Fiona E McKibben
11	296	Long-term and short-term diet analysis in nuisance coyotes across an Urban-rural gradient	Yizi Li
13	319	Investigating <i>Bartonella</i> prevalence of small mammal fleas of the Intermountain West	Cassie M. Stitzman
15	333	Unusual cryptic diversity in southern <i>Cryptotis</i> shrews	Joseph Cook
17	43	Morphological variation & taxonomy of squirrels in the <i>Microsciurus flaviventer</i> group	Pricilla Ceja
19	130	Using sequencing and PCR data to test field identifications of co-occurring <i>Peromyscus</i> at NEON sites	Laura D. Steger
21	166	Mammal life history databases compared	Ethan E Duncil
23	72	"Small" mammalian specimen archives: Perspectives of values for students, from students	Ryan Grutsch
25	107	Effects of student demographics on self-identity as a scientist in course-based research modules	Patrice K Connors
27	143	Exploring the urban-rural gradient: Engaging undergraduates in ecological research	Stephen G Mech
29	153	Biodiversity education at a small rural community college	Karen Z Reiss
31	175	Field safety survey: investigating hazards, mitigation, and responses in mammalogical field work	Rhiannon Jakopak
33	207	From Specimens to Solutions: Leveraging the MSB Mammal Collection for One Health Integration	Destiny F. Gonzalez
35	239	Application of CT scans for teaching STEM-Based-ologies: examples from mammals of the Great Lakes Region	Sofia Cortez
37	246	Increasing gamification and usability in a minigame-based intelligent tutoring system for cardiovascular anatomy	Reva Freedman
39	262	Online photo-guided key to the skulls of Kansas mammals	Rebecca K Hawkins
41	27	Phylogenetic relationships of geomyioid rodents assessed with mitogenomes and ultraconserved elements	Enrique P Lessa
43	44	Looking inside the geographic distribution and phylogenetic relationships of the Mexican large-toothed shrew <i>Sorex macrodon</i>	Stephanye Mata González
45	62	Unraveling the systematics and evolution of the highly diverse tuco-tucos (genus <i>Ctenomys</i>) with genomic data	Ivanna H Tomasco
47	279	Natural history biorepositories - sentinels for environmental contaminants: Assessing mammalian uptake of "Forever Chemicals" (PFAS) & microplastics	Jonathan L. Dunnum
49	117	Investigating niche differentiation of small mammals across elevational zones in the Andes	Keegan B Webb
51	121	The role of developmental constraints in the evolution of the altricial-precocial spectrum	Dana Lin
53	128	How does adaptation to high elevations impact the immune response?	Chloe E Butler
55	229	That's not a hybrid: Using triangle plots to distinguish patterns of admixture and isolation-by-distance	Ben J Wiens
57	232	Systematics and phylogenomics of the mole voles (<i>Ellobius</i> and <i>Bramus</i>) in the Palearctic realm	Amanda K Weller
59	281	How to measure a cat: Understanding scaling of cranial and postcranial elements with body mass	Marina Casiano Ruiz
61	231	How much is enough? Trade-offs in whole-genome sampling approach in the bank vole	Marcos O.R da Cruz
63	284	Population genomics of the invasive brown rat (<i>Rattus norvegicus</i>) in Chicago.	Lourdes Valdez

65	26	A comparative study of predicted brain metabolic rates in Euarchontoglires and Carnivora	Arianna R Harrington
67	51	Shaping survival: Investigating opossum skull morphology in the face of anthropogenic change	Andrew J Hughes
69	126	Stylohyoid-tympanic articulation in shrews and its possible implications for echolocation	Aviva Saadatfar
71	146	Morphological analysis of <i>Sorex</i> to establish age distribution from skull size variation	Noah M Lemons
73	167	Morphological variation of gray fox (<i>Urocyon cinereoargenteus</i>) skulls across time	Samantha L Lamb
75	172	Hippopotamus amphibius premolars: too many... or too few?	Virginia Naples
77	297	Morphological differences in red-backed voles (Genus: <i>Clethrionomys</i>) and potential hybrids	Bailey N Dixon
79	300	Postweaning Allometry in <i>Gracilinanus agilis</i> and <i>Cryptonanus chacoensis</i>	Iveth A. Villalobos
81	21	Fleas from small mammal hosts in the Denver Museum of Nature & Science collection, 2008-2024	Helen K Pigage
83	57	Spatial analysis of California ground squirrels (<i>Otospermophilus beecheyi</i>) in Southern California	Kayce C. Bell
85	65	Use of camera traps to monitor meso-mammals and rodents in an urban park	Timothy McSweeney
87	92	Fecal findings: Investigating spatial variability in diet composition of two sympatric predators.	Mohit Poudel
89	102	Using trait data from specimen tags to identify <i>Peromyscus</i> specimens: a RANGES TCN project	Sophia J Koutsogiannis
91	256	Ecology of the eastern coyote at the McLean Game Refuge, Connecticut.	Samantha M Lewis
93	295	Comparison of black bear (<i>Ursus americanus</i>) diets in eastern and western Oklahoma	Stella C Hubler
95	307	The Bunker Resurvey Project: a century of change in Kansas faunal landscapes	Dianna M Krejsa
97	328	Getting FuncQEE -- 3D models from the rodent tree of life	Cody W Thompson
99	69	A mitochondrial perspective on lineage distributions of <i>Peromyscus leucopus</i> in the Great Plains	Brianna Fields
101	71	A baseline for the evolutionary and genetic legacy of Kansas southern flying squirrels	Grace E Thompson
103	191	Evolutionary history and patterns of divergence in <i>Callosciurus</i> <i>sps.</i> in Southeast Asia	Bhuwan Singh Bist
105	94	Assessment of infrared thermography for measuring thermal biology in wild <i>Otolemur crassicaudatus</i>	Michelle L Sauther
107	134	Effects of dietary treatments on surface temperature of bison (<i>Bison bison</i>) yearling heifers	Kendall M Wald
109	168	Calibrating the heart rate method for estimating small mammal energy expenditure in the field	Samantha J Kennel
111	230	Seasonal and interspecific variation in metabolic rates and hematological indices of free-living rodents in Oklahoma	Richard W. Dolmann

Sunday June 9, 2024	
7:00 AM-5:00 PM	Registration – UMC Aspen Room 285/287/289
Plenary I Glenn Miller Center Ballroom	
8:00 AM	Welcome
8:30 AM	123. Tips for teaching a successful mammalogy course and reflections on the teacher-scholar model in mammalogy Brian S Arbogast Joseph Grinnell Award
9:15 AM	83. Philippine mammals in an age of discovery Lawrence R Heaney C. Hart Merriam Award
10:30 AM	Break – UMC Outdoor Terrace and Tent
11:00 AM	Members Meeting II
12:30 PM	Lunch
12:30 PM	Environmental Consulting Workshop



Sunday June 9, 2024

Session	Technical Session 4: Gut and Diet	Technical Session 5: Physiology I	Technical Session 6: Behavior II
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Alexandra DeCandia		Jennifer Clarke
2:00 PM	177 Diet analysis of Allegheny woodrat (<i>Neotoma magister</i>) using DNA metabarcoding Elizabeth K Service	87 Effects of artificial light at night and noise on Formosan giant flying squirrel's physiology Yu-Tung Hsaio	243 Asymmetrical predation intensity produces divergent antipredator behaviors in primary and secondary prey Corbin C Kuntze
2:15 PM	12 Dining in the chilly season: bats' winter diet in working forests of the southeastern US Santiago Perea	74 Drivers of maternal stress in Rwenzori Angolan Colobus monkeys at Lake Nabugabo, Uganda Samantha M Stead	306 National Park buildings modify the diets and species interactions of ringtails (<i>Bassariscus astutus</i>) Anna R Willoughby
2:30 PM	48 Shotgun metagenomics for the assessment of diet of American black bears (<i>Ursus americanus</i>) Sufia Akter Neha	252 Local adaptation and plasticity in the evolved resistance to cold hypoxia in high-altitude deer mice Naim M Bautista	66 Bison talk: mother-offspring acoustic communication Jennifer A. Clarke
2:45 PM	290 The role of the gut microbiome in supplying essential amino acids to wild granivorous rodents Anejelique J. Martinez	49 Benefits and tradeoffs of warm torpor in a small mammalian hibernator Allyson Hindle	151 Coyote use of prairie dog colonies is most frequent in areas used by American badgers Rebecca M Windell
3:00 PM	33 Channel Island fox and island spotted skunk microbiomes reflect eco-evolutionary dynamics Alexandra L DeCandia	211 Intrinsic and extrinsic drivers of brown lemming stress hormone levels in Utqiagvik, Alaska Jess K Steketee	156 Intersexual roost site selection by the little brown <i>Myotis</i> in Cypress Hills, Saskatchewan, Canada Emma Blanken
3:15 PM	184 Seasonal resource use and dietary partitioning in a novel ungulate community Carson P Hedberg	221 Does oxytocin modulate cortisol in ring-tailed lemurs? A test of the social buffering effect Ludmila T Kumpan	179 Searching for an optimal bilogger timeframe for behavior classification in free-ranging cattle: Implications for inference Stephanie A Cunningham
3:30 PM	BREAK – Outdoor Terrace and Tent		

Sunday June 9, 2024

Session	Technical Session 7: Conservation III	Technical Session 8: Physiology II	Technical Session 9: Behavior III
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Caitlin Wells	Brooks Kohli	Sean Mahoney
4:00 PM	157 Effects of interspecific competitor familiarization on Pacific pocket mouse behavior and reintroduction success <u>Janine N Fischer</u>	47 Comparing ecomorphological, isotopic, and dental microwear dietary proxies in a modern Texas small mammal community <u>Jonathan S Keller</u>	263 Coat color mismatch over winter did not influence snowshoe hare survival or foraging behavior <u>Emily M Monk</u>
4:15 PM	261 Juvenile growth is resilient to variable spring phenology in a high-elevation hibernating mammal <u>Caitlin P Wells</u>	131 Do plant constituents predict an imperiled cottontail's winter diet selection? <u>T.J. McGreevy, Jr.</u>	298 Puma step selection shows a dichotomic response to human disturbance <u>Gonzalo F Barceló</u>
4:30 PM	275 Poop explorers: Predicting latrines of smooth-coated otters in Nepal <u>Aarati Basnet</u>	311 Under pressure: influence of human hunting on stress and diet quality of a boreal ungulate <u>Thomas S. Jung</u>	277 Food hoarding evolution in mammals and implications for the endangered Mt. Graham red squirrel <u>Sean M Mahoney</u>
4:45 PM	283 Forty years of intra- and inter-cave temperatures and locations: implications for bat conversation <u>Darwin C Brack</u>	216 Impacts of plant phenology on desert rodent foraging strategies <u>Joshua M Cortez</u>	212 Comparative kinematics of turning flight in seven North American bat species <u>Aaron J Corcoran</u>
5:00 PM	23 Refugial Corridors and Wildlife Crossings in the Appalachians <u>Lauren M Lyon</u>	218 Carbon isotope patterns of amino acids in Southern Sea Otters: Potential effects of tissue-specific metabolism <u>Alana Robinson</u>	104 Same-sex sexual behavior in Rwenzori colobus follows a similar sexual script to different-sex sexual behavior <u>Karyn A Anderson</u>
5:15 PM	331 Priority areas for conservation of the black-tailed prairie dog ecosystem <u>Ana Davidson</u>	122 Limited intraspecific variation in a key climate suitability trait among widespread small mammal species <u>Brooks A Kohli</u>	150 Reproductive status affects social network dynamics in pallid bats (<i>Antrozous pallidus</i>) <u>Karen E. Mabry</u>
5:30 PM	330 PDOG MAPR: an interactive web-based decision support tool for grassland managers. <u>Maksim Sergeev</u>	81 Spatio-temporal drivers of intra-annual dietary niche variation in a ubiquitous generalist rodent <u>Imogene C Welles</u>	159 Natal dispersal of Arkansas' endemic mammal, the Ozark pocket gopher <u>Monica R Reusche</u>
5:45 PM	93 Microhabitat selection by the Oscura Mountains Colorado chipmunk: an old growth pinyon-juniper woodland specialist <u>Jennifer K. Frey</u>	247 Mechanisms for digestion by fishers and martens in the Pacific Northwest and Great Lakes <u>Emma P Blackdeer</u>	185 Spatial and temporal patterns in cooperative foraging between coyotes and badgers <u>Emma V Balunek</u>
6:00 PM	Free		
7:00 PM	Picnic – Boulder Museum of Contemporary Art		

Monday June 10, 2024

7:00 AM	Registration – UMC Aspen Room 285/287/289		
7:00 AM	NAPC Meetings UMC 386		
Session	Technical Session 10: Population Ecology I	Technical Session 11: Disease Ecology	Technical Session 12: Behavior IV
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Fernando Mercado Malabet	Ilana Mosley	Roger Powell
8:00 AM	164 Reproductive phenologies of neotropical bats: Quantitative approaches and applications Michael R. Willig	201 Early detection of fevers in bison (<i>Bison bison</i>) using infrared thermal imagery: A field-based approach Jeff M Martin	25 Climate change disrupts male mating behavior in a polygynous ungulate Rebecca L Levine
8:15 AM	19 Edge effects on scale-dependent density patterns in two sympatric mouse lemurs in northwestern Madagascar Fernando M. Mercado Malabet	1 Implications of altered climate upon wildlife rabies distribution, burden, emergence, and management Charles E. Rupprecht	73 Drivers of African forest elephant (<i>Loxodonta cyclotis</i>) fission-fusion behavior in a forest-savannah mosaic ecosystem Liam A Jasperse-Sjolander
8:30 AM	95 Drivers of small mammal population and community dynamics in hardwood forests of New England Joshua S Willems	40 Metapopulation's connectivity and rabies persistence in vampire bats (<i>Desmodus rotundus</i>): from field data to models German Botto Nuñez	225 Fitness consequences of social attributes Taylor N Bastian
8:45 AM	293 Influence of proximity to humans and season on an island population of arctic foxes Griffin J Broviak	125 Seroprevalence rates and landscape barriers influence rabies dynamics in simulated urban landscapes Emily M Beasley	6 Disentangling the drivers of individual dietary specialization in cougar (<i>Puma concolor</i>) across multi-prey, mixed-use landscapes Siobhan Darlington
9:00 AM	327 Predicting niche spaces of expanding evening bat (<i>Nycticeius humeralis</i>) populations following white-nose syndrome establishment Sally B Martinez	169 Exploring variation in intestinal microbiota community between <i>Trypanosoma cruzi</i> -infected and uninfected raccoons (<i>Procyon lotor</i>) Ilana A Mosley	31 When apex predators become prey: testing the risk allocation and starvation-predation hypothesis in black bear Emily C Davis
9:15 AM	336 Demography and population dynamics of a source population of meadow voles (<i>Microtus pennsylvanicus</i>) in Pennsylvania Steven R. Sheffield	188 Epigenetic changes associated with prion disease in a hamster model Lexi E. Frank	278 Using Mechanistic Utilization Distributions to Test for Individual Differences Among Black Bears Roger A Powell
9:30 AM	Break – Outdoor South Terrace and Tent		

Monday June 10, 2024

Session	Technical Session 13: Population Ecology II	Symposium: Before there are none: Montane mammals and climate	Technical Session 14: Biogeography I
Room	Glenn Miller West Ballroom		Glenn Miller East Ballroom
Moderator	Carly Scott	Glenn Miller Center Ballroom	Mark Lomolino
10:00 AM	36 Evaluating survey methods to determine presence and species identification of jackrabbits in Washington <u>Allison Stift</u>	341 Untangling the variability in montane mammal responses to climate change <u>Christy M McCain</u>	195 Range limits and diversity patterns of Andean small mammals across extreme elevational gradients <u>Jose H. Urquizo</u>
10:15 AM	152 Viability of the source population for the Great-Lakes American marten recovery network <u>Carly M Scott</u>	288 Climate change increases interspecific competition between leopards and snow leopards in the Central Himalaya, Nepal <u>Narayan P. Koju</u>	238 Energy, area, and traits of island mammals <u>Kimberly J Cook</u>
10:30 AM	343 Humans drive spatial variation in mortality risk for a threatened, hybridizing wolf species <u>John F Benson</u>	314 Climate change as a threat multiplier for wildlife in the high Andes <u>Megan E McDaniels</u>	245 Community-wide trends in carnivoran carnassial morphology as an indicator of ecosystem disruption over time <u>Leila Siciliano-Martina</u>
10:45 AM	242 Cyclic dynamics in a changing climate: snowshoe hare populations across the Great Lakes <u>Rebecca S Chandross</u>	268 Genomic vulnerability of a sentinel alpine mammal under climate change <u>Michael A Russello</u>	16 On being the right size before and during the Anthropocene <u>Mark V Lomolino</u>
11:00 AM	249 Impacts of urban heterogeneity in environmental and societal characteristics on coyote survival <u>Emily Zepeda</u>	99 Marten (<i>Martes americana</i>) cranial morphometrics during climate change in Rocky Mountains of Canada <u>Mark S Boyce</u>	46 Tracing North American weasel distributions through a century of climate and land use change <u>Amanda E Cheeseman</u>
11:15 AM	321 Growth rate of mule deer <i>Odocoileus hemionus</i> under varying population structure <u>Ranjana Pal</u>	148 Using multidisciplinary tools to decode the idiosyncratic response of montane species to environmental change <u>Sabui Bhattacharyya</u>	235 Monthly suitability dynamics of the wild reservoir of Calabazo Hantavirus, <i>Zygodontomys brevicauda</i> <u>Daniel Ibanez</u>
11:30 AM	339 Survival and recruitment of white-tailed deer fawns in southern Texas <u>Kevin T Lovasik</u>	154 Leveraging participatory science for mammalian conservation <u>Johanna Varner</u>	236 Time-specific suitability dynamics for the reservoir of Choclo hantavirus, <i>Oligoryzomys costaricensis</i> <u>Alexander D Hey</u>
11:45 AM	299 One Hundred Years later: genetic diversity and differentiation between two historic bison populations in Colorado <u>Fayelynn F Scheideman</u>		91 North American small mammals shrink with warming climates <u>Katherina B Searing</u>
12:00 PM	Lunch		

Monday June 10, 2024

Session	Technical Session 15: Biogeography II	Technical Session 16: NAPC I	Technical Session 17: Behavior V
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Mauriel Rodriguez Curras	Liesl Erb	Courtney Anderson
1:30 PM	70 Life on the edge: biogeographical patterns and niche overlap within transitional zones for carnivoran mammals <u>Maria A. Hurtado-Materon</u>	139 Revisiting Darwin's range-limit theory in a high-elevation system <u>Peter D Billman</u>	59 Heart rate biologgers reveal individual variation in energetic landscapes for mule deer <u>Michel P Laforge</u>
1:45 PM	144 Environmental and geographic drivers of bat phylogenetic diversity <u>Camilo A Calderón Acevedo</u>	292 Climate drives patterns of occupancy and density more strongly than biogeography at the trailing edge <u>Marie Westover</u>	45 Backcountry Recreation and Carnivore Behavior: Extending and Testing the Assessment Mismatch Hypothesis with Wolverine <u>Joseph Holbrook</u>
2:00 PM	280 Genetic diversity and connectivity of Brush Mice (<i>Peromyscus boylii</i>) in the Madrean Sky Islands <u>Damien C Rivera</u>	186 Mountain goat space-use and resource selection in pika habitat in the La Sal mountains, Utah <u>Mallory Sandoval Lambert</u>	113 Apex predator v. 'super' predator: evaluating carnivore response to human disturbances in a natural system <u>Justin G Clapp</u>
2:15 PM	200 Using species distribution models to predict colonization and extinction processes for a Great Basin shrew <u>Andrew G Gaier</u>	338 Importance of drought and water availability to mammals in increasingly warmer and (effectively) drier climates <u>Erik A Beever</u>	187 Space use and habitat selection of swift fox (<i>Vulpes velox</i>) across a shrubland gradient <u>Kelsie R Buxbaum</u>
2:30 PM	240 Right place, wrong time; biogeographical analyses of Holarctic mammalian megafaunal extinctions during the Late Pleistocene <u>Maxwell N Elkan</u>	289 Investigation of increased nocturnality as an indicator of behavioral adaptability in American pikas (<i>Ochotona princeps</i>) <u>Alessia M Serra</u>	250 Similarities and differences in the airborne and seismic properties of banner-tailed kangaroo rat footdrums <u>Ryan S Almeida</u>
2:45 PM	294 Nine-banded armadillo (<i>Dasypus novemcinctus</i>) in the Blue ridge of east Tennessee: Natural expansion, not invasion <u>Steven C Wallace</u>	220 Characterizing the ecological relationship between American pikas and yellow-bellied marmots in the Rocky Mountains <u>Liesl P Erb</u>	265 Coyotes in the Concrete Jungle: Unraveling how coyotes (<i>Canis latrans</i>) navigate a human-dominated landscape <u>Courtney D Anderson</u>
3:00 PM	BREAK – Outdoor Terrace and Tent		

Monday June 10, 2024

Poster Session II – Outdoor Terrace and Tent (posters on next page)			
Session	Technical Session 18: Wildlife Management I	Technical Session 19: Phylogeography	Technical Session 20: Community Ecology I
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Mark Ditmer	Alex Jensen	Donavan Jackson
3:30 PM	53 Ungulate flight behavioral responses to trail-based recreational activities in the Gunnison Basin <u>Sabrina N Lucero and Patrick Magee</u>	5 Geographic barriers but not life history traits shape the phylogeography of North American mammals <u>Alex J Jensen</u>	11 Using mammal wildlife crossing use to inform ocelot conservation in the USA <u>Thomas J Yamashita</u>
3:45 PM	68 A structured science synthesis of effects from oil and gas development noise on mammals <u>Nathan J Kleist</u>	7 Dispersal of the golden-mantled Ground Squirrel (<i>Callospermophilus lateralis</i>) <u>Nhan T T Nguyen</u>	13 Tails on the Great Plains: Interspecific interactions between two cervids in western Kansas <u>David L. Pearce</u>
4:00 PM	103 Recreation noise alters wildlife behavior and site use <u>Mark A Ditmer</u>	82 Which Global Circulation Model is most realistic regionally? Concordance with genetics for a Neotropical shrew <u>Robert P Anderson</u>	75 Snapshot USA: An annual nationwide mammal survey <u>Brigit Rooney</u>
4:15 PM	189 Home range and movement of Virginia opossums in developed landscapes in Burlington Vermont <u>Shylo R Johnson</u>	332 Genetic survey of the invasive black-rat <i>Rattus rattus</i> (Muridae) in Chile <u>R. Eduardo Palma</u>	170 A computer vision model to classify camera trap images from western Oregon <u>Cara L Appel</u>
4:30 PM	35 Spatial and temporal relationship between free-roaming dogs and critically endangered Chinese pangolin <u>Hsiang Ling Chen</u>	322 Rethinking autumn movement behavior of hoary bats <u>Theodore J Weller</u>	17 The effects of forest management practices across spatial scales on mammal communities and tick densities <u>Stephanie N Hurd</u>
4:45 PM	63 Size matters: Mammal responses to energy development features in the oil sands are spatial scale-dependent <u>Marissa A Dyck</u>	60 Population structure and phylogeography of co-occurring sigmodontine rodents in the Andean Altiplano <u>Daniela Arenas-Viveros</u>	56 Small mammal diversity along an elevational gradient in the Pinaleño Mountains, Arizona <u>Ellen R Tierney</u>
5:00 PM	67 Olfactory attractant and environmental influences on mesocarnivore detection <u>Danielle Brosend</u>	110 The impact of forest restoration on the communication distance of an endangered tree squirrel <u>Ryan Brzozowski</u>	258 Variation in small mammal composition within small Missouri prairies <u>Sean P Maher</u>
5:15 PM	76 The Effects of Anthropogenic Light and Noise on Habitat Selection of Formosan Giant Flying Squirrels <u>Yu Hsiao</u>	135 Fossil bison (<i>Bison bison</i>) of Snake River Site, Minnesota demonstrate inconsistencies with morphological species concept <u>Tasha J Anderson</u>	318 Plains spotted skunks occur independently of a predator and competitor <u>Kara M White</u>

5:30 PM	326 Optimizing attachment of data loggers to bats to meet research needs <u>Kevin Castle</u>	10 Are climate-driven trends in homeostatic functional traits parallel in co-occurring species? <u>Alyssa E Semerdjian</u>	312 Environmental drivers of pelage color variation in the least chipmunk (<i>Tamias minimus</i>) <u>Monica R Reusche</u>
5:45 PM	Free		
7:30 PM	Student Social – The Connection (1st floor of UMC)		



Poster Number	Abstract Number	Title	Presenter
2	112	Sensitivity & specificity analysis in using Kaleidoscope Pro to detect pika calls	Devan C Williams
4	88	Activating volunteers for ecological monitoring and building public engagement in conservation of non-game mammals	Julie Krajewski
6	344	Diversity and prevalence of Bartonella in American Pikas	Hilary H Rinsland
8	291	A changing genetic landscape within an iconic American pika metapopulation over the last half century	Kelly B Klingler
10	15	Flea communities of pikas and sympatric rodents across Mongolia	Josh Pletcher
12	129	Patterns of stress in an isolated population of American pikas (<i>Ochotona princeps</i>)	Karli Weatherill
14	165	Modeling landscape connectivity in a highly fragmented, alpine species, the collared pika	Kailey R Meacham
16	274	Applied bioacoustics for individual pika recognition and call classification	Rachel M Billings
18	286	A game of "I Spy": Artificial intelligence and Pika camera trap images	Eliza K Wesemann
20	28	Relating talus characteristics to habitat use by vulnerable alpine mammals in a changing climate.	Ana Ferreira
22	2	Vocal turn-taking in gibbon song duets, in single and mixed-species groups	Thomas Terleph
24	64	Ranging pattern of village and cattle post dogs in the Eastern Cape	Ming Fei Li
26	124	Temporal insights: understanding body mass and activity patterns in large Neotropical rodents	Lauren Slack
28	133	Habituation to human leads to relaxed antipredator behavior among Guenther's dik-dik (<i>Madoqua guentheri</i>)	Raymond O Owino
30	190	Juvenile pygmy rabbits consume more grasses than adults	Michele M Skopec
32	193	Novel behavior in novel environments: Behavioral changes in invasive squirrels outside their native range	Henry D Hein
34	206	Comparing midden size and construction between four woodrat species	Ashley A. Castro
36	270	Intraspecific diel temporal niche conservatism in Asian euungulates: ecological, evolutionary, and conservation implications.	Namrata Bhandari
38	302	Sound pressure levels correspond to emergence counts in urban bat bridge roosts	Julia Laurenzi
40	323	Abiotic drivers of forest structure and productivity; implications for primate movement and behavior	Brynn Lowry
42	324	Exploring temporal avoidance of invasive species by South American canids	Leticia Rodrigues Moretto
44	30	Diversification and isolation of peripheral populations of <i>Chaetodipus penicillatus</i> in the Mojave Desert	Sean Neiswenter
46	50	Mammals of Cerro de Arcos, Loja Province, Ecuador	Thomas E Lee
48	254	Squirrels of the Madrean Sky Island Archipelago: past, present and future distributions	Binaya Adhikari
50	257	Investigating effects of Allegheny woodrat (<i>Neotoma magister</i>) translocations on landscape genetics	Laura E Porter
52	259	The introduction of an exotic carnivore: stone martens in Wisconsin	RuoHan Zhao

54	39	Ecometric model for body mass and temperature within global terrestrial carnivoran communities	Charles P. Bruce
56	109	Evaluating small mammal response to silvicultural treatments using camera traps and occupancy modeling	Deron L Clark
58	111	Implications of intraspecific diel temporal niche conservatism in African euungulates	Brier E Klossing
60	115	Rodent genetic diversity and gene flow across urban desert remnants in metro Phoenix	Morgan L Pierce
62	118	Interaction network in the Tropical dry forest: an analysis of fragmentation effects	Tatiana Velásquez Roa
64	119	Uncovering rodent lung fungal community dynamics across the Madrean Sky Islands	Luisa J Zamora Chavez
66	155	Impacts of the Cameron peak megafire on ground squirrel body mass	Kadin Samlaska
68	158	Navigating fragmented futures: predicting vulnerability of prairie-associated small mammals in Oklahoma	Emilyn J. Gilmore
70	203	Investigating interactions between herbivores and their effects on habitat structure and function	Mason R Jacobson
72	214	The Role of the Gut Microbiome in Synthesizing Essential Amino Acids from Non-Essential Amino Acids	Leigh D James
74	237	Pumas (<i>Puma concolor</i>) specialize on small-bodied prey in a human-disturbed high Andean ecosystem	Esteban Restrepo-Cortés
76	255	Dietary adaptations of two sympatric woodrat species in the field and the fossil record	Erica L Seguin
78	267	Population structure and genetic variation of mammalian species found on highly disturbed land	Nadiya L. Cavallo
80	316	Environmental and anthropogenic effects on terrestrial mammal richness in Oklahoma City Metro area	Zachary Woods
82	42	Saving an Indian antelope from oblivion: examining social-ecological dimensions to inform blackbuck conservation planning	Dhawal Mehta
84	77	Mapping Asian Bears – a Novel Approach for Large-scale Species Range Mapping to Inform Conservation	Chengcheng Zhang
86	234	Impacts of feral cats on the behavior and ecology of the Espiritu Santo Island ringtail	Madeleine E Zuercher
88	272	Impact of invasive Burmese python on two endemic endangered species in the Florida Keys	Shauna M Sayers
90	329	Cascading trophic effects following the loss of a keystone rodent	Maksim Sergeyev
92	38	Spatial interactions of axis and white-tailed deer in the Texas hill country	MacKenzie G Hoffman
94	89	Predicting potential mountain lion distribution in Missouri	Kara B. Gregory
96	97	Demographic assessment adds context to dietary variation observed in fossil peccaries (<i>Platygonus compressus</i>)	Melissa I Pardi
98	100	Evaluating small mammal biodiversity using camera traps	Amanda Laboy
100	116	Kinship and space use patterns in a Texas population of white-backed hog-nosed skunk (<i>Conepatus leuconotus</i>)	Laura J Giron
102	171	Small mammal communities within established Blowout Penstemon (<i>Penstemon haydenii</i>) habitat in the Sandhills of Nebraska	Levi R Fettig
104	198	Small mammal population trends after six years mark-recapture research in gypsum hills of western Oklahoma	Claire A Wiley
106	205	Population structure and dynamics of <i>Peromyscus</i> in Chicago, Illinois	Angelica Bahena
108	54	Undercover carriers: rodents as hidden reservoirs for pathogenic fungi transmission	Kailey J Mahoney
110	85	Zoonotic tick-borne pathogens in Colorado – Surveying the prevalence of infection with NEON small mammal data	Kelley McCahill
112	162	Evolutionary and environmental drivers of Sin Nombre Virus and deer mouse interaction	Tommy M Herrera

114	174	Using camera traps to determine exposure of mammalian hosts to <i>Ornithodoros turicata</i> in cave habitats	Brianna Mena
116	202	Mammalian pathogen prevalence in the Atlantic Forest of South America: a review	Lizette Arroyo
118	273	Environmental dynamics of rodent-borne hantaviruses in Panama	Marlon E Cobos
120	317	exploring riparian species diversity in northern Colorado with Traditional Ecological Knowledge	Lizzy C Osterhoudt
122	287	A tail of three dogs: canid dynamics along the Alaskan coasts	Ethan Morton
124	79	Moonlight and activity patterns of mammals in the chaparral	Grace Pollock
126	320	Impact of fenced exclosure on mammal abundance in an old orchard	Victoria Schiding
128	178	Patterns of flea abundance on small mammals in Mongolia	Wade M Burris
130	325	Utilizing camera traps to estimate river otter populations in Northern Utah	Rossetta S Chen
132	227	Gray seals (<i>Halichoerus grypus</i>): Using bone conduction hearing tests to establish hearing thresholds	Amanda M Moore



Tuesday June 11, 2024

Tuesday June 11, 2024			
7:00 AM	Registration – UMC Aspen Room 285/287/289		
7:00 AM	NAPC Meetings UMC 386		
Session	Technical Session 21: Evolutionary Biology	Technical Session 22: Wildlife Management II	Technical Session 23: Community Ecology II
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Anderson Feijó	Paul Stapp	Rachel Short
8:00 AM	3 Rodent phenotypes in the Anthropocene: integrating plastic traits across cities <u>Javier delBarco-Trillo</u>	114 Endangered San Joaquin kit fox response to invasive salt cedar removal in Central Valley uplands <u>Rebecca N Davenport</u>	222 Heading West: A glimpse into swift foxes (<i>Vulpes velox</i>) navigating a novel landscape <u>Austin B Smith</u>
8:15 AM	8 On the limits of Dehnel's phenomenon <u>Bryan S. McLean</u>	142 Mammalian and Avian Community Response to African Elephant (<i>Loxodonta africana</i>) Habitat Disturbance in Southeastern Kenya <u>Charles E. Rupprecht</u>	18 Toward a better understanding of the relationship between bats and prairie dogs <u>Lorelei Patrick</u>
8:30 AM	20 The build-up of Asian mammal faunas <u>Anderson Feijó</u>	285 Ungulate resource selection in bark beetle-impacted forests of Colorado <u>Timothy J Andrews</u>	55 Different mammals, same structure: co-occurrence structure of North American mammal paleocommunities across the Plio-Pleistocene transition <u>Alex B Shupinski</u>
8:45 AM	141 Genome evolution in the hero shrew <u>Austin S. Chipps</u> and <u>Terrence C. Demos</u>	309 Designing a winter roadkill survey protocol to standardize and increase efficiency of currently used methods <u>Paul Rivera</u>	90 Gastrointestinal morphology is an effective functional dietary proxy that predicts small mammal community structure <u>Olivia S Chapman</u>
9:00 AM	210 Andean leaf-eared mice (<i>Phyllotis</i>) living at extreme elevations: genomic and physiological insights into natural history <u>Jay F Storz</u>	334 Patterns of rodenticide exposure in urban California coyotes <u>Paul Stapp</u>	106 Carnivore-mediated secondary dispersal of mycorrhizal fungi <u>Michael J Joyce</u>

9:15 AM	266 Rates of species diversification of bats (Chiroptera) compared with paleobiotic and paleoenvironmental variables <u>Justin R. Baez</u>	244 Climatic-parasitic disease risks of helminths for North American bison (<i>Bison bison</i>) <u>Hayden Wolfe</u>	132 The influence of inselbergs on bat diversity in an Afrotropical ecosystem <u>Amanda L Grunwald</u>
9:30 AM	276 Genomics of adaptation to extreme elevation in the highest-dwelling mammal in the world, <i>Phyllotis vaccarum</i> <u>Schuyler W Liphardt</u>	37 Characterizing a Free-Roaming Cat Population to Predict Predation of Threatened Island Species <u>Sarah Gheida</u>	182 Integrating functional traits and environments across spatial and temporal scales for conservation <u>Rachel A Short</u>
9:45 AM	282 Mismatched morphologies: external and post-cranial morphology offer contrasting ecological explanations in a “non-adaptive” radiation. <u>Jonathan Nations</u>	24 A review of squirrel use of mast within managed hardwood forests <u>Sarah E Baker</u>	308 Carnivore chronicles: Co-occurrence and habitat use in the tropical forest of Manas National Park, India <u>Urjit Bhatt</u>
10:00 AM	Break – Outdoor South Terrace and Tent		



Colorado State University

Tuesday June 11, 2024

Session	Technical Session 24: Morphology	Technical Session 25: Phylogenetics/Phylogenomics I	Technical Session 26: Wildlife Management III
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator	Gabby Guilhon	Dana Green	Marie Tosa
10:30 AM	269 Cranial variation in shape and size of <i>Oligoryzomys destructor</i> (Cricetidae: Rodentia) along the Peruvian Yungas <u>José E. Serrano-Villavicencio</u>	14 Drivers of population genetic structure in an archipelagic red-backed vole population in Wisconsin's Apostle Islands <u>Bijit Khadka</u>	84 Declining detections of the Plains spotted skunk in Kansas warrant conservation action <u>Daniel J Benson</u>
10:45 AM	253 Comparative shape differentiation in limb morphology across habitats in the <i>Peromyscus maniculatus</i> Species Complex <u>Haley N. Ellis</u>	58 Assessing population genetics of Appalachian cottontails (<i>Sylvilagus obscurus</i>) in West Virginia, USA <u>Madison L Miller</u>	108 Post-capture age- and sex-specific survival rates of mule deer in Utah, USA <u>Madelon van de Kerk</u>
11:00 AM	251 Utilizing natural history collections to investigate the relationship between cranial morphology and habitat <u>Brandy A Craft</u>	78 Conservation genetics of southern Appalachian sky island woodland jumping mice <u>Emma C Watersmith</u>	192 Applications and Limitations of a Data Fusion Approach to Monitor Forest-Dwelling Wildlife <u>Courtney L King</u>
11:15 AM	241 Comparative myology of the three orders of South America marsupials: Didelphimorphia, Paucituberculata and Microbiotheria <u>Gabby N Guilhon</u>	213 Combining whole-genome and reduced-representation genomic data for assessing population genomics of a neotropical generalist <u>Diego F. Alvarado-Serrano</u>	215 Statewide spatial and temporal trends of Wisconsin's wildlife from trail camera data <u>Jennifer L Stenglein</u>
11:30 AM	219 Seasonal changes in shrew morphology <u>Katherine M Gorman</u>	233 How many short-tailed shrews species (genus Blarina) are in Florida, anyway? <u>Verity L Mathis</u>	228 Exploratory ecology of reintroduced elk <u>Braiden A Quinlan</u>
11:45 AM	163 Body length in <i>Peromyscus sonoriensis</i> (Rodentia: Cricetidae) <u>Bruce E. Buttler</u>	345 Unraveling the role of The Andes in the diversification of the nectar bat <i>Glossophaga soricina</i> <u>Natalia Cortes-Delgado</u>	271 Habitat selection and density of <i>Canis latrans</i> within the Long Point National Wildlife Area, Canada <u>Natalia Hrynko</u>
12:00 PM	101 How does trabecular structure influence the mechanical properties of tiny mammalian vertebrae?	86 Even old names can be new: changes in mammalian nomenclature since 2005 <u>Jelle S Zijlstra</u>	149 Rest-site selection by western spotted skunks in the Pacific Northwest <u>Marie I Tosa</u>

	<u>Stephanie M Smith</u>		
12:15 PM	Lunch		

Tuesday June 11, 2024			
Session	Technical Session 27: Phlogenetics/Phylogenomics II	Technical Session 28: NAPC II	Technical Session 29: Evolutionary Biology
Room	Glenn Miller West Ballroom	Glenn Miller Center Ballroom	Glenn Miller East Ballroom
Moderator		Patrice Connors	Nathan Upham
1:30 PM	136 Population genetics and geographic structuring of <i>Clethrionomys gapperi</i> in North Carolina's endangered spruce-fir forests. <u>Alexandra G DeLuca</u>	313 Historic population demography and niche partitioning of sympatric species of pikas at Ladakh <u>Nandini Rajamani</u>	346 How many mouse-deer are there?: Re-evaluation of chevrotain (Artiodactyla: Tragulidae) systematics using genomics and morphology <u>Marcus A.H. Chua</u>
1:45 PM	140 Genetic management in the recovery of Mexican wolves <u>James R Heffelfinger</u>	176 Investigating measures of thermal stress in a climate sensitive mammal <u>Jennifer L Wilkening</u>	340 Uniting the mammalverse of genomic and ecological knowledge <u>Nathan S Upham</u>
2:00 PM	173 Coastal marten conservation genomics and tools for noninvasive genetic monitoring <u>Margaret A Hallerud</u>	138 Characterization of American Pika (<i>Ochotona princeps</i>) diets using DNA metabarcoding <u>Jazmine O Camacho Servin</u>	197 A genomic and morphological assessment of the Pinyon Deermouse, <i>Peromyscus truei</i> (Cricetidae: Neotominae) <u>Javier E Colmenares-Pinzón</u>
2:15 PM	223 Genetic and demographic parameters of pampas cat in a Mangrove forest in northwestern Peru <u>Manuel Santiago-Plata and Jennifer Adams and Lisette P. Waits</u>	137 Potential for spillover of rabbit hemorrhagic disease at Great Sand Dunes National Park and Preserve <u>Airy A Peralta</u>	145 The role of body size and diet in recent extinctions of southern hemisphere small mammals <u>Sofia Barbero</u>
2:30 PM	224 Mitochondrial phylogenetics of California Channel Island deer mice reveals multiple colonization events <u>Madeleine A Becker</u>	127 Silent Peaks: Widespread Progressive Extirpation of American Pika Populations of the Northern Sierra <u>Chris Smith</u>	301 Niche differentiation among evolutionarily divergent lineages of the montane shrew, <i>Sorex monticola</i> <u>Antonia Androski</u>

2:45 PM	226 Fur trade aftermath: Genetic insights and management strategies for furbearer species in post-contact North America Shrushti Modi	34 Effects of plague on rodents occupying talus slopes and lava flows: implications for American pikas David Eads	303 Genomic basis of rapid adaptation to introduced sylvatic plague in black-tailed prairie dogs Loren Cassin-Sackett
3:00 PM	248 Comparative phylogeography of two jerboa complexes (Dipodidae) help elucidate the assembly of Central Asian deserts Lexi B Baca	289 Investigation of increased nocturnality as an indicator of behavioral adaptability in American pikas (<i>Ochotona princeps</i>) Alessia M Serra	304 Shrew(d) insights into Eurasian biogeography (Genus <i>Sorex</i> ; Eulipotyphla; Soricidae) Ryan S Almeida
3:15 PM	260 Bridging the gap: Niche modeling and mitogenomes shed light into the diversification of genus <i>Urocyon</i> Susette Castañeda-Rico		265 Coyotes in the Concrete Jungle: Unraveling how coyotes (<i>Canis latrans</i>) navigate a human-dominated landscape Danielle M Land
3:30 PM	BREAK – Outdoor Terrace and Tent		

Tuesday June 11, 2024	
4:00 PM – 5:00 PM	Capstone Session: Dr. Katie Hinde – UMC Glenn Miller Center Ballroom
5:00 PM – 7:00 PM	On your own
7:00 PM – 10:00 PM	Closing Social and Award Ceremony – Folsom Field

