



PROGRAM

**50th Annual Business Meeting
and Symposium
Hybrid**

February 25, 26, 27, and 28, 2025

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REQUIREMENTS FOR SPEAKERS AND PRESENTATIONS

The Desert Tortoise Council **does not permit inappropriate images** as part of presentations in the program or as any part of symposia. Inappropriate photos include, but are not limited to: vulgar, lewd, or suggestive images of people; people in awkward positions or scanty attire; and people engaged in personal and private activities. The Desert Tortoise Council expects all participants and speakers to maintain a high level of professionalism.

Guidelines for Asking and Answering Questions at the Symposium

Several years ago, several attendees approached members of the Board of Directors with concerns about the tone of questions to speakers. The concerned parties included members of the audience as well as speakers. Some members of the audience noted that some questioners appeared to be vitriolic and angry; some questioners used the opportunities at the microphone to present their views in long-winded soliloquies rather than to ask questions. Furthermore, some speakers were irritated with the questions asked of them. To avoid a similar occurrence at future meetings, the Board of Directors developed guidelines for asking and answering questions at symposia. These guidelines offer an opportunity to review the purpose for holding annual symposia and to reiterate our long-standing policy of professionalism and civility to all participants.

The Desert Tortoise Council promotes conservation of the desert tortoise in a variety of ways, including annual symposia. One purpose of the symposia is to bring together scientists, wildlife biologists, managers, representatives of non-government organizations, and other interested parties to share the latest information on tortoises and their management. The speakers vary in their interests and areas of expertise, as well as in their experiences in giving presentations. Some speakers are giving their very first public presentations; others have presented hundreds of lectures and power point programs. All are welcome. The symposium is a learning experience, and learning is facilitated by respect and courtesy. All speakers should receive courteous and professional treatment and, in turn all speakers should treat the audience with respect. By following the simple guidelines outlined above, the Board hopes to have a collegial atmosphere and a productive meeting.

To assist with the policy of professional and civil behavior, the Board requests that speakers and questioners follow the guidelines listed below:

1. Ask one question at a time. If you have two questions, do not ask both at once. Allow the speaker to answer the first question before proceeding to the second question.
2. If more than one person is waiting to ask, then ask only one question.
3. All questions are legitimate. However, the way the question is framed is usually the issue. Each question can be framed in a professional and courteous manner. Speakers, too, can draw on the following guidelines when answering questions.
4. Speakers should consider that all questions are legitimate and fair. However, some may be poorly worded because the questioner may not fully understand the subject or may need some assistance in framing the question in a professional manner. The speaker may need

to clarify the question and should then repeat the question to the audience so that the audience will hear it clearly.

5. Some questions are not easily answered for a variety of reasons: no data, insufficient data, topic cannot be discussed because court proceedings are underway, etc. The speakers should state why the question cannot be answered or can only be addressed in part. The speaker may need to think at length about an appropriate answer and, in such cases, may need to say just that. The speaker may refer the questioner to the email in the Abstracts.

PROGRAM

50th ANNUAL DESERT TORTOISE COUNCIL SYMPOSIUM (Hybrid)

Held February 25, 26, 27, and 28, 2025

Palace Station Hotel and Casino, Las Vegas, Nevada

All sessions and presentations are in Pacific Standard Time

And held in the Grand Ballroom, Salons F and G

Note: Speakers are the first person noted for each presentation unless * denotes otherwise.

Raffles and announcements shall be held at the end of each break and day.

FEBRUARY 24, MONDAY EVENING

6:00 p.m. Pre-Conference Mixer with food
Sponsored by Southern Nevada Environmental, Inc. and Playa Environmental

FEBRUARY 25, TUESDAY MORNING

8:00 a.m. **Annual Business Meeting of the Desert Tortoise Council**
*Mari Quillman, Chair: Board of Directors, Desert Tortoise Council, Acton, CA;
and ECORP Consulting, Irvine, CA*

9:30 a.m. **Introduction of Desert Tortoise Council Chair, Meeting Chairs and Opening Remarks**
Mari Quillman, Chair; Ed LaRue, Jr., and Bruce Palmer, Meeting Chairs: Board of Directors, Desert Tortoise Council, Acton, CA

9:50 a.m. **50 Years Ago, the Beginnings**
*Kristin H. Berry: Board of Directors, Desert Tortoise Council, Acton, CA; and
U.S. Geological Survey, Reno, NV*

10:00 a.m. **Desert Tortoise Council Activities – 2024**
*Mari Quillman, Chair: Board of Directors, Desert Tortoise Council, Acton, CA;
and ECORP Consulting, Inc., Irvine, CA*

10:15 a.m. **Introducing the Ecosystems Advisory Committee (EAC)**
*Edward L. LaRue, Jr., Board of Directors, Desert Tortoise Council, Acton, CA;
and Circle Mountain Biological Consultants, Inc., Wrightwood, CA*

10:30 a.m. Panel: Questions and Discussion

Session 1. Plenary Address. Management of Off-Highway Vehicles in the West Mojave Desert— Decades of Effort

10:45 a.m. **Desert tortoise management in the California Desert Conservation Area:
West Mojave route designation struck down again**
Lisa Belenky and Ileene Anderson, Center for Biological Diversity, Oakland, CA

11:15 a.m. Panel: Questions and Discussion

11:45 a.m. Lunch Break

FEBRUARY 25, TUESDAY AFTERNOON

Session 2. Augmentation of Populations, Part 1: Translocation and Headstarting of Desert Tortoises: Guidance and Updates

- 1:30 p.m. **Safeguarding the conservation value and subsequent potential contributions of displaced Mojave desert tortoises**
Kimberleigh J. Field, Kristina Drake, Roy C. Averill-Murray, Kerry L. Holcomb, and Corey I. Mitchell: Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Las Vegas, NV
- 1:45 p.m. **Progress in the Marine Corps Air Ground Combat Center's desert tortoise translocation program**
Brian T. Henen: Marine Air Ground Task Force Training Command, Twentynine Palms, CA
- 2:00 p.m. **Status of desert tortoise head-starting in Mojave National Preserve and planned applications**
Brian D. Todd¹, Carter Harris¹, José Hernández¹, Tracey D. Tuberville², and Kurt A. Buhlmann²: ¹UC Davis, Davis, CA; and ²University of Georgia's Savannah River Ecology Lab, Aiken, SC
- 2:15 p.m. **Progress in the Marine Corps Air Ground Combat Center's desert tortoise headstart program**
Brian T. Henen Marine Air Ground Task Force Training Command, Twentynine Palms, CA
- 2:30 p.m. **Can burrow microclimate and nest site selection buffer Mojave desert tortoise egg hatching success and sex ratios against climate change?**
Thomas A. Radzio, Talisin T. Hammond, Ronald R. Swaisgood, and Melissa J. Merrick: San Diego Zoo Wildlife Alliance, Escondido, CA
- 2:45 p.m. Panel: Questions and Discussion
- 3:00 p.m. Break

Session 3. Augmentation of Tortoises, Part 2: Headstarting and Release of Bolson Tortoises

- 3: 30 p.m. **Establishing free-living bolson tortoise (*Gopherus flavomarginatus*) populations in the US**
Christiane Wiese, Scott Hillard, and Javier Gonzalez: Turner Endangered Species Fund, Ladder Ranch, Caballo, NM
- 3:45 p.m. **Bolson tortoise conservation on a national wildlife refuge**
Vance Wolf and Sam Vassallo: U.S. Fish and Wildlife Service, Albuquerque, NM

- 4:00 p.m. **Grassland detection through satellite analysis at Mapimi Biosphere Reserve: A foundation for connectivity studies and conservation strategies for *Gopherus flavomarginatus***
Jacqueline Espinoza-Pichardo¹, Edgar G. Leija², Craig Stanford³ and Gamaliel Castañeda-Gaytan¹: ¹Juarez University, State of Durango, MX; ²National Autonomous University of Mexico, Mich.
- 4:15 p.m. Panel: Questions and Discussion

Session 4. The Morafka Grant: History, Past Recipients, and Their Current Status

- 4:30 p.m. **A retrospective of the recipients of the David J. Morafka Award**
Judy Hohman and Mari Quillman: The Desert Tortoise Council, Acton, CA
- 5:00 p.m. Break
- 5:30 to 6:30 p.m. Poster Session with Authors

TUESDAY EVENING

- 6:00 p.m. **Western Soirée Mixer with food, fun, and music!**
Sponsored by Vita Sheehy

FEBRUARY 26, WEDNESDAY MORNING

- 7:00 a.m. Breakfast provided
- 7:55 a.m. Announcements

Session 5. Studies and Research on the Demography and Distribution of Desert Tortoises (*Gopherus agassizii*)

Featured Speaker and Invited Guest

- 8:00 a.m. **Population viability of Egyptian Tortoises: Analyzing demographic sensitivities and extinction risks in North Sinai**
Basem A. Motwaly¹, Omar Attum², Denise M. Thompson¹, and Day B. Ligon¹: ¹Missouri State University, Springfield, MO; and ²Indiana University Southeast, New Albany, IN
- 8:30 a.m. **Accurately estimating demography and population density for Mojave desert tortoises and why it matters for management and recovery**
Kristina Drake and Corey Mitchell: Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Las Vegas, NV
- 8:45 a.m. **Spatial capture-recapture density estimation of an imperiled, semi-fossorial, spatially aggregated chelonian at the scale of conservation**
Sean M. Murphy, Ally P. Xiong, Felicia C. Chen, Sarah M. Doyle, Chad J. Wilhite, K. Kristina Drake¹, and Todd C. Esque: Address when work was conducted was U.S. Geological Survey, Boulder City, NV

- 9:00 a.m. **Conservation corridors for desert tortoises – Demography trends in the Ivanpah Valley in California and Nevada**
Kenneth Nussear¹, Todd Esque², Amy Vandergast³, Corey Mitchell⁴, Kirsten Dutcher⁵, Justice Best¹, Steven Hromada⁶, Felicia Chen², Amanda M. McDonald², and Benjamin O. Gottsacker²: ¹University of Nevada, Reno, NV; U.S. Geological Survey, ²Boulder City, NV and ³San Diego, CA; ⁴U.S. Fish and Wildlife Service, Tucson, AZ; ⁵University of California, Irvine, CA; and ⁶Fresno Chaffee Zoo, CA
- 9:15 a.m. **Forty-six years of change in a population of Agassiz’s desert tortoises in the Colorado Desert: 1977–2023**
Kristin H. Berry¹, Steven R. Lee², Peter Woodman³ and Mark T. Massar⁴ U.S. Geological Survey, ¹Reno, NV and ²Yosemite, CA; ³Kiva Biological Consultants, Inyokern, CA; and ⁴U.S. Bureau of Land Management, Palm Springs, CA
- 9:35 a.m. Panel: Questions and Discussion
- 9:50 a.m. Break
- 10:15 a.m. **BLM Sonoran Desert tortoise long-term monitoring program update**
Timothy H. Bradley, Matthew R. Karam, Ryan P. O’Donnell, Michael Ingraldi Arizona Game and Fish Department, Phoenix, AZ
- 10:30 a.m. **Monitoring results from Pima County’s 2024 Sonoran desert tortoise campaign**
Sami Hammer, Melissa Van Kleeck-Hann, and Sierra Lauman: Pima County Conservation Lands and Resources, Tucson, AZ
- 10:45 a.m. **Tortoise hotspots: Understanding current distribution patterns and their implications**
Tim Shields and William I. Boarman: Tortoises for Tomorrow LLC, Joshua Tree, CA; and Conservation Science, Research and Consulting, Spring Valley, CA
- 11:15 a.m. **Weather and ephemeral vegetation drivers of apparent occupancy of Mojave desert tortoises (*Gopherus agassizii*)**
Seth Harju¹ and Scott Cambrin²: ¹Heron Ecological, Kingston, ID; and ²Clark County Desert Conservation Program, Las Vegas, NV

- 11:30 a.m. **New methods to estimate Mojave desert tortoise population response to multiple stressors across its range**
Madeline Standen¹, S.J. Hromada¹, L. J. Allison^{2†}, J. Dougherty³, K.K. Drake², T.C. Esque⁴, B. Folt^{1,5}, J. Freilich⁶, E. Hunter⁷, J.E. Lovich⁸, A.M. McLuckie⁹, C.I. Mitchell², K.E. Nussear³, E. Olimpi¹, A. Parsons¹, K. Shoemaker³, M.S. Vamstad⁶, A.G. Vandergast¹¹, M.A. Walden³, and B.G. Dickson¹: ¹Conservation Science Partners, Inc.; ²U.S. Fish and Wildlife Service, Desert Tortoise Recovery Office, Las Vegas, NV; ³University of Nevada, Reno, NV; U.S. Geological Survey, ⁴Boulder City and ⁵Reno, NV, ⁷Blacksburg, VA, ⁸Flagstaff, AZ, and ¹¹San Diego, CA; ⁶Joshua Tree National Park, Twentynine Palms, CA; and Utah Division of Wildlife Resources, Washington County Field Office, Hurricane, UT; ^{2†}Deceased
- 11:45 a.m. Panel: Questions and Discussion
- 12:00 Noon Lunch Break

FEBRUARY 26, WEDNESDAY AFTERNOON

- 1:25 p.m. Announcements

Session 6. Stewardship, Restoration, and Wildlife Protection

- 1:30 p.m. **Collaborative conservation: Preservation Ranch's initiatives for habitat restoration and wildlife recovery in the West Mojave Desert**
Heidi Brannon, Priscilla Guzmán, and Joshua Heflin: Preservation Ranch, San Bernardino, CA
- 1:45 p.m. **Stewardship of the Desert Tortoise Research Natural Area (DTRNA): New tools for old management challenges**
Roger A. Dale¹ and Melissa L. Brown²: ¹Desert Tortoise Preserve Committee, Inc., Ridgecrest, CA; and ²Law Enforcement Ranger, Bureau of Land Management, CA
- 2:00 p.m. **Protecting an ancient resident: Recovery and conservation strategies for the Mojave desert tortoise in Utah**
Ann M. McLuckie¹, Curtis Roundy², and Jessica Kinross²: ¹Utah Division of Wildlife Resources, Hurricane, UT; and ²Utah Division of Wildlife Resources, Cedar City, UT
- 2:15 p.m. **Desert tortoise recovery and management update for Mojave National Preserve and Castle Mountains National Monument**
Michael K. Burchett, Sofia Andeskie, Debra Hughson, Neal Darby, Misumi Ogawa, and Ray McPadden: Mojave National Preserve and Castle Mountains National Monument, National Park Service Barstow, CA

- 2:30 p.m. **Natural features and ecological significance of the Chuckwalla National Monument**
*Mark Massar: Bureau of Land Management, California Desert District
Palm Springs, CA*
- 2:45 p.m. Panel: Questions and Discussion
- 3:00 p.m. Break

Session 8. The Desert Tortoise as an Umbrella Species

- 3:30 p.m. **Is the desert tortoise an umbrella species for other species in the Mojave Desert?**
Kenneth Nussear¹, Thomas Dilts¹, Todd Esque², Kirsten Dutcher³, Anjana Parandhaman⁴, Nathan Byer⁵, Amy Vandergast⁶, Daniel Shryock², Scott Bassett¹, Doug Boyle¹, Marjorie Matocq¹, and Jill Heaton¹: ¹University of Nevada, Reno, NV; ²U.S. Geological Survey, Las Vegas NV, and ⁶San Diego, CA; ³University of California, Irvine; ⁴UC Santa Cruz; and ⁵Cleveland Metroparks, Cleveland, OH.
- 3:45 p.m. Panel: Questions and Discussion

Session 9. A New and Updated Book on Reptiles and Amphibians of California with New Art

- 4:00 p.m. **A new herpetological field guide for California**
Robert W. Hansen¹ and Jackson D. Shedd²: ¹Museum of Vertebrate Zoology, University of California, Berkeley, CA; and ²San Diego Natural History Museum, San Diego, CA
- 4:15 p.m. Panel: Questions and Discussion, followed by meeting the authors and artist; book signing and sales; viewing original artwork, prints, and photographs, and sales
- 5:30 to 6:30 p.m. **(Closed Session). H.A.T. Refresher Kickoff**
Kristina Drake, Kimberleigh J. Field: Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, Las Vegas, NV

FEBRUARY 27, THURSDAY MORNING

- 7:00 a.m. Breakfast provided
- 8:25 a.m. Announcements

Session 10. The Illegal Trade in Turtles and Tortoises: Publication or Release of Locations

- 8:30 a.m. **Craig Stanford: Introduction and moderator to the panel**
Panel Members: Kristin H. Berry, Ed LaRue, Kristina Drake, Brian Henen, Ken Nussear, Vance Wolf, Christiane Wiese, and more

Session 11. PLENARY ADDRESS: Climate Change and the Challenges for Recovering Desert Tortoises

- 9:00 a.m. **Why fighting climate change is not helping the desert tortoise**
William E Rees: University of British Columbia, Vancouver, BC Canada
- 9:40 a.m. Questions and Discussion
- 10:00 a.m. Break

Session 12. Ecology and Behaviors of Sonoran and Texas Tortoises

- 10:30 a.m. **Sonoran desert tortoise movement patterns, habitat use, and threats in an urbanizing landscape**
*Jessie M. Dwyer¹, Rob E. Hallagan¹, Kerry T. Olsson¹, Chad A. Rubke²:
¹McDowell Sonoran Conservancy, Scottsdale, AZ; and ²Arizona Game and Fish Department, Phoenix, AZ*
- 10:45 a.m. **Analysis of the thermal ecology of the Texas tortoise (*Gopherus berlandieri*) with regard to potential anthropogenic alteration of its thermal environment**
Daniel A. Guerra and Joseph A. Veech: Texas State University, San Marcos, TX
- 11:00 a.m. **Sex and vegetation cover drive home range size for Sonoran desert tortoises in southern Arizona. Student Paper.**
Sean Sutor, Nancy E. McIntyre, and Kerry Griffiths-Kyle: Texas Tech University, Lubbock, TX
- 11:15 a.m. **Effects of prescribed fire on Texas tortoise (*Gopherus berlandieri*) ecology in a southern Texas rangeland. Student Paper.**
Camryn M. Kiel¹, Stephen L. Webb¹, Danielle K. Walkup¹, Sandra Rideout-Hanzak², Evan P. Tanner², Ashley M. Tanner², David B. Wester², Andrea Montalvo³, and Toby J. Hibbitts¹: Texas A&M University, ¹College Station and ²Kingsville, TX; and ³The East Foundation, Hebbbronville, TX
- 11:30 a.m. Panel: Questions and Discussion
- 11:45 a.m. Lunch Break

FEBRUARY 27, THURSDAY AFTERNOON

Session 13. Efforts by Government Agencies to Recover Desert Tortoises and Restore Habitat

- 1:25 p.m. Announcements
- 1:30 p.m. **The Desert Tortoise Management Oversight Group (MOG): Progress and challenges for recovery**
Glen Knowles: U.S. Fish and Wildlife Service, Las Vegas, NV
- 1:45 p.m. **U. S. Fish and Wildlife Service desert tortoise recovery updates**
Jeremy Bisson: U.S. Fish and Wildlife Service, Palm Springs, CA

- 2:00 p.m. **Mojave Desert Sentinel Landscape**
*Philip Murray: Marine Corps Air Ground Task Force Training Command, G-7
Government and External Affairs*
- 2:15 p.m. **The Recovery and Sustainment Partnership (RASP), a collaborative tortoise
recovery effort in the Western Mojave**
Clay F. Noss: Mojave Desert Land Trust, Joshua Tree, CA
- 2:30 p.m. **Clark County Multiple Species Habitat Conservation Plan update**
Scott Cambrin: Clark County Desert Conservation Program, Las Vegas, NV
- 2:45 p.m. Panel: Questions and Discussion
- 3:00 p.m. Break

Session 14. Raven Management in Desert Tortoise Habitat and the Urban-Desert Interface

- 3:30 p.m. **Common raven density trend in California's Tortoise Conservation Areas
between 2020 and 2024**
*Kerry L. Holcomb, K. Kristina Drake, Kimberleigh J. Field, and Corey I.
Mitchell: U.S. Fish and Wildlife Service - Desert Tortoise Recovery Office, Las
Vegas, NV*
- 3:45 p.m. **Common raven management in the Upper Virgin River Recovery Unit in
2023-2024**
*Michael Schijf¹, Cameron Rognan¹, Kerry L. Holcomb², Danielle Costantini³,
and Michael Stroh⁴: ¹Washington County Habitat Conservation Plan, St. George,
UT; ²U.S. Fish & Wildlife Service, Desert Tortoise Recovery Office, Palm
Springs, CA; ³U.S. Fish and Wildlife Service, West Valley City, UT; and
⁴Colorado State University, Fort Collins, CO*
- 4:00 p.m. **Behavioral change programming to reduce human provided food subsidies
for ravens in the desert tortoise's range**
*Kaitlyn E. Shaw, James Danoff-Burg, and Maya Nuñez: The Living Desert Zoo
and Gardens, Palm Desert, CA*
- 4:15 p.m. **The haunted landscape: Making ravens unwelcome**
*Tim Shields and William I. Boarman: Tortoises for Tomorrow LLC, Joshua Tree,
CA; and Conservation Science, Research and Consulting, Spring Valley, CA*
- 4:30 p.m. Panel: Questions and Discussion
- 4:45 p.m. End of session

THURSDAY EVENING, GRAND BALLROOM, SALONS A, B, AND C

- 5:30 p.m. No host mixer
- 6:30 p.m. Banquet

- 7:30 p.m. Winners of the Photography Contest
Margaret Fusari
- 7:45 p.m. Student Awards
Michael W. Tuma
- 7:50 p.m. Recipients of Desert Tortoise Council Awards
Kristin H. Berry, Bruce Palmer, and Ed LaRue
- 8:15 p.m. **Banquet Address: The Global State of Tortoise Conservation**
Craig Stanford: Chair, Tortoise and Freshwater Turtle Specialist Group, IUCN; and University of Southern California, Los Angeles
- 8:35 p.m. Raffle and Auction

FEBRUARY 28, FRIDAY MORNING

- 7:00 a.m. Breakfast provided
- 8:10 a.m. Announcements

Session 15. A Perspective for the Future for the Desert Tortoise Council

- 8:15 a.m. **Empowering the Council into the Future: A Perspective from the Newer Desert Tortoise Council Board Members**
Mary Lane Poe, Max Havelka, and Luke Basulto: Desert Tortoise Council, Acton, CA

Session 16. Looking to the Past for the Paleontological Record and Genomes of Tortoises

- 8:30 a.m. **Native American influence on the pre-contact distribution of desert tortoises (*Gopherus agassizii*) in the Mojave Desert**
Kelly R. McGuire, William R. Hildebrandt, Chloe L. McGuire, Kaely Colligan, and Jerome King: Far Western Anthropological Research Group, Davis, CA
- 8:45 a.m. **A tale of three Gopherus tortoises: Insights from genomic analysis of Sonoran and Mojave desert tortoises (*Gopherus morafkai* and *G. agassizii*) compared with the Texas Tortoise (*G. berlandieri*)**
Kenro Kusumi¹, Jade Mellor², Sarah Baty¹, Jacquelyn Tleimat³, Griffin M. McDaniels², Paul Crump⁴, Shawn F. McCracken³, and Greer A. Dolby²: ¹Arizona State University, Tempe, AZ; ²University of Alabama at Birmingham, AL; ³Texas A&M University – Corpus Christi; and ⁴Texas Parks and Wildlife Department, Austin, TX
- 9:00 a.m. **Genetic diversity in mitochondrial cytochrome B gene and control region sequences of *Gopherus agassizii* from Nevada National Security Site (NNSS)**
Xianan Liu, Derek Hall, Jeanette Perry, and Ronald Warren: Nevada National Security Site, Mission Support and Test Services, LLC, North Las Vegas, NV

- 9:15 a.m. **Demographic and genetic insights from a decade of study of Mojave desert tortoises in the Ivanpah Valley**
Amy Vandergast¹, Anna Mitelberg¹, Steven Hromada², Felicia Chen¹, Amanda M. McDonald¹, Benjamin O. Gottsacker¹, Kenneth Nussear³, Todd Esque¹: ¹U. S. Geological Survey; ²Conservation Science Partners, Inc. Truckee, CA; and ³University of Nevada, Reno
- 9:30 a.m. Panel: Questions and Discussion
- 9:45 a.m. Break

Session 17. Applications of Fencing to Protect Tortoises and New Techniques with Drones

- 10:05 a.m. **Metal fencing installed around old mining shaft openings located at the Saint Elmo Mine in Atolia, California, to protect endangered Mojave Desert tortoises**
Sean P. Tucker: Gold Discovery Group LLC, Newport Beach, CA
- 10:20 a.m. **Drone-based radio tracking and photographic survey methods: Recent developments**
Matthew S. Bandy: Resi Solutions, Albuquerque, NM
- 10:35 a.m. Panel: Questions and Discussion

Session 18. Factors Influencing Fungi and Bacteria in Desert Tortoises

- 10:50 a.m. **Environmental influences on fungal and bacterial microbiomes associated with Agassiz desert tortoise (*Gopherus agassizii*) in California**
Brendan J. O'Brien^{1,2}, Brian T. Henen³, and Mia R. Maltz^{1,4}: ¹CoRenewal Inc., Cathedral City, CA; ²Hyphae Consulting, Inc., Huntington, VT; ³Marine Air Ground Ground Task Force Training Command, Twentynine Palms, CA; and ⁴University of Connecticut, Storrs, CT

Session 19. Memorial Statements for Friends and Colleagues

- 11:05 a.m. **In Memory of Joe Probst**
Mari Quillman, Chair, Board of Directors, Desert Tortoise Council; and ECORP Consulting, Irvine, CA
- 11:15 a.m. **Life Celebration of Larry LaPré (9/7/1947 to 3/30/2024)**
Edward L. LaRue, Jr.: Circle Mountain Biological Consultants, Inc.; Board of Directors, Desert Tortoise Council; and Mohave Ground Squirrel Conservation Council, Wrightwood, CA
- 11:30 a.m. **Closing Remarks**
Mari Quillman, Chair, Board of Directors, Desert Tortoise Council; and ECORP Consulting, Irvine, CA
- 11:35 a.m. The Meeting is Adjourned

POSTERS

Seasonal shelter use and activity patterns in the Sonoran desert tortoise

Julianne Bullock, Nancy E. McIntyre, Sean Sutor, Kerry Griffis-Kyle: Texas Tech University, Lubbock, TX

Can behavioral plasticity buffer temperature exposure in juvenile desert tortoises?

Rachael S. Cohen, Thomas A. Radzio, Talisin T. Hammond, Ronald R. Swaisgood, and Melissa J. Merrick: San Diego Zoo Wildlife Alliance, Escondido, CA

Hot spots & cold shoulders: How does familiarity affect behavior & burrow use of hatchling desert tortoises?

Talisin T. Hammond^{1,3}, Thomas Radzio¹, Tristan Walter², and Melissa J. Merrick¹: ¹San Diego Zoo Wildlife Alliance, Escondido, CA; ²Max Planck Institute of Animal Behavior, Department of Collective Behavior, 78464 Konstanz, Germany. Both T.T. Hammond and T. Radzio shared equally in the work.

Bolson tortoise (*Gopherus flavomarginatus*) reproduction and nest site selection in New Mexico

Scott Hillard and Christiane Wiese: Turner Endangered Species Fund, Ladder Ranch, Caballo, NM

Bolson tortoises (*Gopherus flavomarginatus*) in the US

Scott Hillard and Christiane Wiese: Turner Endangered Species Fund, Ladder Ranch, Caballo, NM

Validating iButtons for characterizing summer nighttime microhabitat use in desert tortoises across life stages

Katelyn N. Rock, Thomas A. Radzio, Talisin T. Hammond, Ronald R. Swaisgood, and Melissa J. Merrick: San Diego Zoo Wildlife Alliance, Escondido, CA

EXHIBITORS

Grand Ballroom, Salons, B, and C

Artist, Jackson Shedd Art & Photography Studio. Prints and Original art of reptiles, amphibians, birds, and other wildlife. Facebook: <https://www.facebook.com/jacksonsheddstudio>. Instagram: @jackson_shedd. Website: <https://jacksonshedd.com/>

Basin and Range Watch and Western Watersheds Project. Laura Cunningham. PO Box 70, Beatty, NV, 89003. Phone: (775) 553-2806. Email: bluerockiguana@gmail.com. Websites: <https://www.basinandrangewatch2.org/home> & <https://westernwatersheds.org/>. (Non-Profit)

Bio Logical, LLC. Alana Wise. 1400 Colorado St., Suite C, Boulder City, NV 89005. Phone: (702) 596-4353. Website: <https://getbiological.com>. Email: awise@getbiological.com. (Sponsor/Organization Member)

Book: New Field Guide. *California Amphibians and Reptiles*, by Robert Hansen and Jackson D. Shedd. Princeton Field Guide, published 14 Jan 2025. Email: CAherpguide@gmail.com

Center for Biological Diversity. Lisa Belenky. 2100 Franklin Street, Suite 375, Oakland, CA 94612. Phone: (510) 844-7107. Website: www.biologicaldiversity.org. Emails: lbedlenky@biologicaldiversity.org, and ianderson@biologicaldiversity.org. (Non-profit)

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Mohave Ground Squirrel Conservation Council. Kathy Simon. P.O. Box 1660 Wrightwood, CA 92397. Email: info@mgsconservation.org. Website: <https://mgsconservation.org>. Email: kathy@ironwoodbio.com. (Non-profit/Sponsor)

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