



PROGRAM

44th Annual Meeting and Symposium
Westward Look Wyndham Resort and Hotel, Tucson, AZ
February 21–23, 2019

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FORTY-FOURTH ANNUAL MEETING AND SYMPOSIUM OF THE DESERT TORTOISE COUNCIL

Westwards Look Wyndham Grand Resort and Spa, Tucson, Arizona
February 21–23, 2019

**Speaker order: First person listed is the speaker, unless an asterisk indicates another author
NOTE: Time is specific to each speaker*

FEBRUARY 20, 2019

Field Trip to Gila Monster Sites led by Roger Repp et al.

6:00–6:45 PM

Annual Meeting of the Corporation

7:00–9:00 PM

Mixer with hors d'oeuvres hosted by Southern Nevada
Environmental, Inc. at the Sonoran Rooftop Patio

FEBRUARY 21, 2019

ALL PRESENTATIONS IN THE SONORAN BALLROOM

7:30 AM – 5:00 PM

Registration; also on February 22 and until noon on February 23
Foyer to the Sonoran Ballroom

8:30 AM

Welcome Address

*Michael W. Tuma, Chair, Board of Directors, Desert Tortoise
Council*

8:40 AM

Introduction of Meeting Chairs: Al Muth¹ and Bruce Palmer²:
*¹Emeritus Director, Boyd Deep Canyon Desert Research Center,
CA; and ²Member, Board of Directors, Desert Tortoise Council,
and Jacobs Engineering Corporation, AZ*

8:45 AM

Auction and Other Announcements

*Mari Quillman: Member, Board of Directors, Desert Tortoise
Council and ECorp Consulting Inc., CA*

Session 1. Plenary Addresses and Awards

Chair: Kristin H. Berry, Desert Tortoise Council and U.S. Geological Survey,
Riverside, CA

Plenary Address 1.

Conservation Award Recipients: Anders G.J. Rhodin and Peter
Paul van Dijk

8:45 AM **Global conservation status of turtles and tortoises (Order Testudines), with an emphasis on Testudinidae and *Gopherus***
Anders G.J. Rhodin^{1,5}, Craig B Stanford², Peter Paul van Dijk^{3,5}, Luca Luiselli⁴, Russell A. Mittermeier³, and Eric V. Goode⁵:
¹Chelonian Research Foundation, MA; ²University of Southern California; ³Global Wildlife Conservation, TX; ⁴Inst. for Development Ecology Conservation and Cooperation, Italy; and ⁵Turtle Conservancy, NY

Plenary Address 2. Winner of the Robert C. Stebbins Research Award: K. Kristina Drake

9:15 AM **Enhancing tortoise conservation and management by understanding and improving habitat condition**
K. Kristina Drake¹, Todd Esque¹, and Ken Nussear²: ¹U.S. Geological Survey, NV; and ²University of Nevada

Session 2. Invited Session with Featured Speakers: Nutrition and Growth in Desert Tortoises

Co-Chairs: Elliott Jacobson, University of Florida; and K. Kristina Drake, U.S. Geological Survey, NV

9:40 AM **How variation in juvenile and adult growth rates influence life history and trait values of long-lived turtles and tortoises**
Justin Congdon, Rio Rico, AZ

10:10 AM Coffee, Tea, and Water in the Vigas Patio

10:30 AM **Biology and development of the chelonian shell**
Elliott R. Jacobson, University of Florida

11:00 AM **Growth studies in hatchling and juvenile gopher tortoises (*Gopherus polyphemus*)**
David Rostal, Jackie Entz, Matt Erickson, Julie Cobb, and Matt Carey: Georgia Southern University

11:25 AM Panel Discussion

11:45 AM LUNCH

Session 3. Health, Disease, and New Approaches

Chair: Maggie Fusari, Member, Board of Directors, Desert Tortoise Council

1:15 PM **Immune and sex-biased gene expression in the threatened Mojave desert tortoise**
Greer Dolby¹, Cindy Xu¹, Kristina Drake^{2}, Todd Esque², and Kenro Kusumi¹: ¹Arizona State University; and ²U.S. Geological Survey, NV*

- 1:30 PM **Development of multilocus sequencing typing (MLST) for *Mycoplasma agassizii* to assess genetic variability (Student Paper)**
Alexandra M. Burne and Mary B. Brown: University of Florida
- 1:45 PM **The large mechanosensitive channel protein of *Mycoplasma agassizii*: Are differences reflective of host evolutionary pressures (Student Paper)**
Mariah Watson, Alexandra M. Burne, and Mary B. Brown: University of Florida
- 2:00 PM **Ticks and Mojave desert tortoise health assessments (Student Paper)**
Molly Bechtel¹, Todd Esque², Kristina Drake², Felicia Chen², and Nathan Nieto¹: ¹Northern Arizona University; and ²U.S. Geological Survey, NV
- 2:15 PM Panel Discussion

Session 4. Applications of Genetics to Regional and Local Issues for Tortoises

Chair: Bob Murphy, University of Toronto and Royal Ontario Museum, Toronto, Canada

- 2:30 PM **Genomic insights into speciation of Southwest desert tortoises**
Greer Dolby, Timothy Webster, Dale DeNardo, Melissa Wilson Sayres, and Kenro Kusumi: Arizona State University
- 2:45 PM **Genes in space: What Mojave desert tortoise genetics can tell us about landscape connectivity in the Ivanpah Valley (Student Paper)**
Kirsten E. Dutcher¹, Amy G. Vandergast², Ken E. Nussear¹, Todd Esque³, Anna Mitelberg², Marjorie D. Matocq¹, and Jill S. Heaton¹: ¹University of Nevada; and U.S. Geological Survey, ²CA; and ³NV
- 3:00 PM Refreshments in the Vigas Patio
- 3:20 PM **Genetic origins and population status of desert tortoises in Anza-Borrego Desert State Park, California**
Jeffrey A. Manning^{1,2} and Taylor Edwards³: ¹Calif. Dept. of Parks and Recreation, ²Washington State University; and ³University of Arizona

3:35 PM **Efficacy of DNA sampling from herbivorous reptile scat**
*Taylor Edwards¹, John Clemons¹, Jeffrey A. Manning², and
Melanie Culver³: ¹University of Arizona; ²California Dept. of
Parks and Recreation; and ³U.S. Geological Survey Coop. Unit at
the University of Arizona*

3:50 PM Panel Discussion

Session 5. A Diversity of Topics: Avian Use of Tortoise Burrows, Protected Areas, and
Assessments of Herpetofaunal Composition

Chair: Ed LaRue, Member of the Board of Directors, Desert Tortoise Council, and Circle
Mountain Biological Consultants, CA

4:05 PM **Birds not in flight: Using camera traps at desert tortoise
(*Gopherus agassizii*) burrows to study avian behavior at a wind
farm**
Shellie R. Puffer^{1}, Laura A. Tennant¹, Mickey Agha², David
Delaney³, Jeffrey E. Lovich^{1*}, Leo J. Fleckenstein⁴, Jessica
Briggs⁵, Terence R. Arundel¹, Amanda L. Smith⁶, Andrew Walde⁷,
and Joshua R. Ennen⁸: ¹U.S. Geological Survey, AZ; ²University
of California; ³U.S. Army Construction Engineering Research
Laboratory, IL; ⁴University of Kentucky; ⁵Colorado State
University; ⁶The Sonoran Institute, AZ; ⁷Walde Research and
Environmental Consulting, CA; and ⁸Tennessee Aquarium
Conservation Institute, TN*

4:20 PM **Long-term data collection and trends of a 130-acre high desert
riparian and upland preserve in northwestern Mohave
County, Arizona**
*Julie Alpert and Robert Faught: Willow Creek Environmental
Consulting, LLC, AZ*

4:35 PM **The herpetofauna of the Santa Rita Experimental Range and
adjacent urbanized areas**
John C. Murphy: Field Museum, IL

4:50 PM Panel Discussion

5:05 PM Adjourn to Poster Session and Mixer, Sonoran Rooftop Patio

5:30 PM Mixer. Greet Special Guests, Award Winners, and Featured
Speakers: Anders Rhodin, Peter Paul van Dijk, K. Kristina Drake,
Elliott Jacobson, David Rostal, and George Heinrich

6:30 PM Buffet: Sonoran Rooftop Patio

8:00 PM Featured Presentation and Speaker: SONORAN BALLROOM

The Big Turtle Year: Celebrating Wild Turtles Across the United States

George L. Heinrich^{1,2} and Timothy J. Walsh^{2,3}: ¹Heinrich Ecological Services, FL; ²Florida Turtle Conservation Trust, FL; and ³Bruce Museum, CONN

FRIDAY, FEBRUARY 22, 2019. PRESENTATIONS IN THE SONORAN BALLROOM

7:00–8:00 AM Breakfast, Santa Catalina Ballroom

Session 6. Report on the Multi-year Translocation at the Large-Scale Translocation Site, NV

Chair: Roy Averill-Murray, Desert Tortoise Recovery Office, U.S. Fish and Wildlife Service, NV

8:00 AM **History of the Large-Scale Translocation Study Site in Nevada**
Kimberleigh J. Field, U.S. Fish and Wildlife Service, NV

8:15 AM **Translocations, changes in density, and survivorship in the large scale translocation site, Nevada, 1997-2015**
Linda Allison. U.S. Fish and Wildlife Service, NV

8:30 AM **Assessment of Mojave desert tortoise health inside and outside the large scale translocation site**
Josephine Braun¹, Tristan Burgess², Carmel Witte¹, Nadine Lamberski¹, and Bruce Rideout¹: ¹San Diego Zoo Global, CA; and ²Acadia Wildlife Services

8:45 AM **Harnessing genomics to provide probable geographic origins for tortoises in the large-scale translocation site, Nevada**
Peter A. Scott and H. Bradley Shaffer: University of California, Los Angeles

9:00 AM **Future directions of the large-scale translocation site, Nevada**
Roy Averill-Murray, U.S. Fish and Wildlife Service, NV

9:15 AM Panel Discussion

Session 7. Research and Monitoring of the Sonoran Desert Tortoise (*Gopherus morafkai*)

Chair: Cristina Jones, Arizona Game and Fish Department and Member, Board of Directors, Desert Tortoise Council

- 9:30 AM **Population viability of Sonoran desert tortoises**
Steven P. Campbell^{1,4}, Erin R. Zylstra^{1,5}, Catherine R. Darst², Roy C. Averill-Murray^{3}, and Robert J. Steidl¹: ¹University of Arizona, Tucson; U.S. Fish and Wildlife Service, ²CA and ³NV; ⁴Albany Pine Bush Preserve Commission, NY; and ⁵Michigan State University*
- 9:45 AM **Results and lessons learned from the first year of Pima County's Sonoran desert tortoise monitoring program**
Jeffrey M. Gicklhorn and Ian W. Murray: Pima County Office of Sustainability and Conservation, AZ
- 10:05 AM Coffee, Tea, and Water: Vigas Patio
- 10:25 AM **An inside look into the construction of Pima County's Sonoran desert tortoise monitoring program**
Ian W. Murray and Jeffrey M. Gicklhorn: Pima County Office of Sustainability and Conservation, AZ
- 10:40 AM **Sonoran desert tortoises in Arizona: An overview of recent and ongoing projects of the Wildlife Contracts Branch of the Arizona Game and Fish Department**
Chad A. Rubke, Ryan P. O'Donnell, and Cristina A. Jones: Arizona Game and Fish Department
- 10:55 AM **Sonoran desert tortoises (*Gopherus morafkai*): Some observations on seasonal variation in behavior**
Brian K. Sullivan, Thomas Cahill, and Elizabeth A. Sullivan: Arizona State University
- 11:10 AM Panel Discussion

Session 8. More about turtles

Chair: Ken MacDonald: Member, Board of Directors, Desert Tortoise Council; and Newfields, NV

- 11:30 AM **Where has turtle ecology been, and where is it going?**
Jeffrey E. Lovich¹ and J. Whitfield Gibbons²: ¹U.S. Geological Survey, AZ; and ²University of Georgia, SC
- 11:50 AM Lunch

Session 9. Applications of Models and New Technology to Tortoise Conservation and Management

Chair: Judy Hohman, Member, Board of Directors, Desert Tortoise Council

- 1:00 PM **The application of new models for the conservation of the Mojave desert tortoise**
Matthew Moskwik, Pasha Feinberg, and Joy Page: Defenders of Wildlife, Washington, D.C.
- 1:15 PM **A range-wide model of omnidirectional connectivity for the Mojave desert tortoise (*Gopherus agassizii*)**
Miranda E. Gray¹, Brett G. Dickson^{1}, Bryan P. Wallace¹, Kenneth Nussear², Todd Esque³, Eric Stofferahn¹, and Tony Chang¹:
¹Conservation Science Partners, CA; ²University of Nevada-Reno; and ³U.S. Geological Survey, NV*
- 1:30 PM **Impact of solar and wind development on conservation values in the Mojave Desert of California**
Sophie S. Parker¹, Brian S. Cohen², and James Moore³: The Nature Conservancy, ¹Los Angeles, and ²San Diego, CA; and ³Las Vegas, NV
- 1:45 PM **Modeling the impacts of roads and mitigation efforts on the viability of desert tortoise (*Gopherus agassizii*) populations**
J. Mark Peaden¹, Tracey D. Tuberville², Kurt A. Buhlmann², and Brian D. Todd¹: ¹University of California; and ²University of Georgia
- 2:00 PM **The use of emerging drone technology for management of the common raven (*Corvus corax*) for conservation of the Mojave desert tortoise (*Gopherus agassizii*)**
Tim Shields¹, Stephen Boland², and Mercy Vaughn²: ¹Hardshell Labs, Inc. CA; and ²Sundance Biology, Inc., CA
- 2:15 PM **The use of drones as a conservation management tool and burrow mapping for the Bolson Tortoise (*Gopherus flavomarginatus*)**
James X. Liu, Max Maurer, Ross Kiester, and Mercy Vaughn: Turtle Conservancy, NY
- 2:30 PM Panel Discussion
- 2:45 PM Refreshments: Vigas Patio

Session 10. Land and Conservation for the Three Sister Species of Tortoises and the Bolson Tortoise

Chair: Eric Goode, The Turtle Conservancy, NY

- 3:10 PM **Introductions**
Eric Goode, The Turtle Conservancy, NY
- 3:15 PM **Adaptive conservation in a checkerboard landscape—hot spots, holistic management, and thinking outside the box**
Cody Hanford: Transition Habitat Conservancy, CA
- 3:30 PM **Leveraging public-private partnerships in private land conservation**
Peter M. Satin: Mojave Desert Land Trust, CA
- 3:45 PM **Land acquisition, protection, education, and research**
Ron Berger and Jun Lee: Desert Tortoise Preserve Committee, Inc.: CA
- 4:00 PM **Private land conservation in southern Arizona, Arizona Land and Water Trust**
Liz Petterson, Arizona Land and Water Trust
- 4:15 PM **Private land conservation in the foothills Thornscrub of Sonora, Mexico. Northern Jaguar Project**
Diane Hadley: President, Northern Jaguar Project
- 4:30 PM **Acquisition and protection of critical habitat for the Bolson tortoise (*Gopherus flavomarginatus*) in the Bolsón de Mapimí Biosphere Reserve, Durango, Mexico**
*C.B. Stanford¹, P.P. van Dijk^{2,4}, M.L. Vaughn³, and E.V. Goode⁴:
¹University of Southern California; ²Global Wildlife Conservation, TX; ³Sundance Biology, Inc., CA; and ⁴Turtle Conservancy, NY*
- 4:45 PM **Strategies for private land conservation in the tropical deciduous forest of Alamos, Sonora, Mexico**
*J. MacKay¹, L. Lozano¹, D. Welborn², and M. Vaughn³:
¹Naturaleza y Cultura Sierra Madre, Sonora, MX; ²Nature and Culture International, CA; and ³Sundance Biology, Inc., CA*
- 5:00 PM Panel Discussion
- 5:15 PM Adjourn
- 5:30 PM Mixer and Review of Student and Other Posters: Santa Catalina Ballroom

- .6:30 PM Dinner, Santa Catalina Ballroom
- 7:30 PM Awards
- 8:00 PM **Banquet Address: Bottom Up! Nature and Culture International's Model for conserving over 25 million acres and counting**
Charles Smith, Nature and Culture International, CA
- 8:30 PM Raffle and Auction

SATURDAY, FEBRUARY 23, 2019. PRESENTATIONS IN THE SONORAN BALLROOM

- 7:00–8:00 AM Breakfast, Santa Catalina Ballroom

Session 11. Research on Translocation and Head Starting of Desert Tortoises

Chair: Larry LaPré, Member, Board of Directors, Desert Tortoise Council; and retired Wildlife Biologist, California Desert District, U.S. Bureau of Land Management

- 8:00 AM **Post-release movement and survival until dormancy of hybrid head-started Mojave desert tortoises (*Gopherus agassizii*) (Student Paper)**
Pearson McGovern¹, Kurt Buhlmann¹, Brian Todd², Clinton Moore³, J. Mark Peadar², Jeff Hepinstall-Cymerman¹, and Tracey Tuberville¹: ¹University of Georgia, ²University of California; and ³U.S. Geological Survey Coop Unit with University of Georgia
- 8:15 AM **Variables affecting survival of juvenile desert tortoises after release from headstart pens at Edwards AFB, a preliminary report. Part 1. Size and growth**
Kristin H. Berry, Michael W. Tuma, and Jeremy S. Mack: U.S. Geological Survey, CA
- 8:30 AM **Variables affecting survival of juvenile desert tortoises after release from headstart pens at Edwards AFB, a preliminary report. Part 2. Behaviors and home range**
Michael W. Tuma, Kristin H. Berry, and Jeremy S. Mack: U.S. Geological Survey, CA
- 8:45 AM **Status of translocated tortoises in southwest Utah: A summary of growth, movement and survival**
Ann M. McLuckie¹, Richard A. Fridell¹, Michael J. Schiif², and Cameron B. Rognan²: ¹Utah Division of Wildlife Resources; and ²Habitat Conservation Administration, Washington County, UT

- 9:00 AM **Issues facing desert tortoises ten years after translocation in an urbanizing area**
Paul Delaney¹ and Edward LaRue, Jr.²: ¹Copper Mountain College, CA; and ²Circle Mountain Biological Consultants, CA
- 9:15 AM **Multi-year monitoring of survival following mitigation-driven translocation of desert tortoises**
Brett Dickson¹, Rick Scherer¹, Amanda Kissel^{1}, Bryan Wallace¹, Miranda Gray¹, Amanda Scheib², and Bruce Weise³:
¹Conservation Science Partners, CA; ²Scheib Biological LLC, NV; and ³Southwestern Ecological Research Co., AZ*
- 9:30 AM **The 2017-2018 Tortoise Translocation by the Marine Corps Air Ground Combat Center (Combat Center)**
Brian T. Henen: Marine Air Ground Combat Center, CA
- 9:45 AM **Evaluating the utility of supplemental data to improve estimation of post-translocation survival of Mojave desert tortoises**
Seth M. Harju¹, Scott M. Cambrin², Roy C. Averill-Murray³, Melia Nafus⁴, Kimberleigh J. Field³, and Linda J. Allison³: ¹Heron Ecological LLC, ID; ²Clark County Desert Conservation Program, NV; ³U.S. Fish and Wildlife Service, NV; and ⁴San Diego Zoo Global, CA
- 10:00 AM Coffee, Tea, and Water in the Vigas Patio
- 10:20 AM Discussion

Session 12. The Importance of Legal Actions in Advancing Conservation Priorities

Winner of the Kristin H. Berry Annual Award

Chair: Bruce Palmer, *Member, Board of Directors, Desert Tortoise Council, and Jacobs Engineering Corporation, AZ*

- 10:40 AM **Desert tortoise: Still protected by still declining...**
Ileene Anderson¹, Lisa Belenky^{2}, and Patrick Donnelly³: Center for Biological Diversity in ¹Los Angeles and ²San Francisco, CA; and ³Las Vegas, NV*

Session 13. Revisiting Another Denizen of Tortoise Habitats: Gila Monsters

Chair: Dan Beck, Central Washington University

- 11:00 AM **Warming up with *Heloderma* from the desert to the Tropical Dry Forest**
Daniel Beck: Central Washington University

- 11:30 AM **More luck than brains: The opportunistic discovery of hatchling Gila monsters in a semi-urban nest**
Roger Repp: Retired, National Optical Astronomy Observatory, , AZ
- 11:50 AM Lunch
- 1:00 PM Announcements of Student Awards and Winner of the David J. Morafka Research Award
- 1:15 PM **Gila monster (*Heloderma suspectum*) population genetics contributes to understanding the biogeography of Sonoran Desert reptiles at Saguaro National Park, Arizona**
Taylor Edwards¹, Victoria Sophia Farrar², and Kevin Edward Bonine¹: ¹University of Arizona; and ²University of California
- 1:30 PM **The influences of energy and water balances on foraging effort in Gila monsters**
Dale F. DeNardo and Christian D. Wright: Arizona State University
- 2:00 PM **Sequencing the Gila monster (*Heloderma suspectum*) genome to unravel mysteries of squamate adaptation and evolution**
Timothy H. Webster^{1,2}, Grant A. Denbrock¹, Dale F. DeNardo¹, and Melissa Wilson¹: ¹Arizona State University; and ²University of Utah
- 2:15 PM Panel Discussion

Session 14. Governmental and Private Approaches to Recovery of Desert Tortoises

Chair: Becky Jones, Member, Board of Directors, Desert Tortoise Council; and California Department of Fish and Wildlife

- 2:35 PM **Activities of the Desert Tortoise Council - 2018**
Michael Tuma, Chair, Board of Directors, Desert Tortoise Council
- 2:50 PM **Captive desert tortoise survey in the greater Las Vegas Area**
Sarah A. Mortimer¹, Kobbe D. Shaw¹, Stephen M. Miller², and Jinju Lee²: ¹Tortoise Group, NV; ²University of Nevada
- 3:05 PM **Clark County Multiple Species Habitat Conservation Plan update**
Scott Cambrin: Clark County Desert Conservation Program, NV

- 3:15 PM **U.S. Fish and Wildlife Service Update on the Desert Tortoise Recovery Activities**
Florence M. Deffner: U.S. Fish and Wildlife Service, NV
- 3:25 PM **Strategic minimization of road effect**
Kerry L. Holcomb¹, Cathy Wilson², Florence M. Gardipee³, Brian Croft¹, and Roy C. Averill-Murray¹: U.S. Fish and Wildlife Service at ¹Palm Springs, CA, and ²Las Vegas and ³Reno, NV
- 3:35 PM **Management of desert tortoise habitat on Bureau of Land Management lands in Arizona**
Philip Cooley, Bureau of Land Management, AZ
- 3:45 PM **Desert tortoise management and research in Joshua Tree National Park**
Michael Vamstad: Joshua Tree National Park, CA
- 3:55 PM **QuadState local governments authority: A partner in desert tortoise conservation and recovery in the Mojave and Sonoran deserts**
Gerry Hillier, Riverside, CA
- 4:05 PM Panel Discussion
- 4:25 PM Adjourn

POSTERS: Sonoran Rooftop Patio. Listed in order by first author's last name

Ticks and tick-borne pathogens of Mojave desert tortoises (Student Poster)

Molly Bechtel¹, Todd Esque², Jeffrey Lovich³, and Nathan Nieto¹: ¹Northern Arizona University; and U.S. Geological Survey, ²NV, and ³AZ

Sky Islands High School desert tortoise habitat project (Student Poster)

Lucas Bogard, Science Teacher; Shari Popen, Director; Students: Tristan Speagle, Anthony Adkins, James Alter, Keenan Hart, and Vanessa Navarro: Sky Islands High School, AZ

A desert tortoise tale of burrows at two sites: It was the best of times and the worst of times

Kristy Cummings, Shellie R. Puffer, Jeffrey E. Lovich, and Terry Arundel: U.S. Geological Survey, AZ

Extensive community partnerships lead to a successful wildlife overpass and underpass on the edge of the highly urbanized Tucson, Arizona region

Kathleen Kennedy¹, and Jeff Gagnon² (presented by Maggie Fusari³): ¹Coalition for Sonoran Desert Protection, AZ; ²Arizona Game and Fish Department, Phoenix; and ³Member, Board of Directors, Desert Tortoise Council

An ecologically founded design for a targeted non-lethal predator aversion device to protect Agassiz's desert tortoises from depredation

Caroline Kingsley and Michael Jenkins: Charles River Analytics, MA

Mining genomes to reveal the evolution of gene families in reptiles relevant to tortoise health (Student Poster)

Matheo Morales, Greer A. Dolby, and Kenfro Kusumi: Arizona State University

Virus discovery in Mojave and Sonoran desert tortoises (Student Poster)

Joseph Orton, Matheo Morales, Greer A. Dolby, Kara Schmidlin, Rafaela S. Fontenele, Simona Kraberger, Tim Webster, Melissa Wilson Sayres, Kenro Kusumi, and Arvind Varsani: Arizona State University

Community solar project environmental monitoring and research

Barrett J. Scurlock: HDR Inc., NV

VENDORS AND EXHIBITS: Sonoran Terrace

Nonprofit Organizations

Center for Biological Diversity. Lisa Belenky, 1212 Broadway, Suite 800, Oakland, CA 94612.
Phone: (510) 844-7100. Website: <http://www.biologicaldiversity.org>. E-mail:
lbelenky@biologicaldiversity.org

Desert Tortoise Council. 4654 East Avenue S, #257, Palmdale, CA 93552
Website: <http://www.deserttortoise.org>

Desert Tortoise Preserve Committee, Inc. Jillian Estrada, 4067 Mission Inn Avenue, Riverside, CA 92501. Phone: (955) 683-3872; Fax: (951) 683-6949
Website: <http://www.tortoise-tracks.org>. E-mail: dtpc@pacbell.net

Nature and Culture International. Jennifer MacKay, 1400 Maiden Lane, Del Mar, CA 92014.
Phone (858) 259-0374. Website: <https://natureandculture.org/places/Mexico/monte-mojino-reserve/>
Email: jmackay@natureandculture.org

The Living Desert Zoo and Garden. Sarah Greely, 47900 Portola Ave., Palm Desert, CA 92260.
Phone (760) 346-5694. E-mail: sgreely@livingdesert.org

Tucson Herpetological Society. Maggie Fusari, P.O. Box 709, Tucson, AZ 85702. Website:
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Field and Laboratory Equipment

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