## **EDITORIALS AND ANNOUNCEMENTS**

NON-PEER REVIEW SECTION

## In Memoriam:

# PHILIP A. MEDICA, HERPETOLOGICAL STALWART (1941–2020)

TODD C. ESQUE<sup>1,4</sup>, R. BRUCE BURY<sup>2</sup>, AND KEN NUSSEAR<sup>3</sup>

<sup>1</sup>U.S. Geological Survey, 160 North Stephanie Street, Henderson, Nevada 89074, USA

<sup>2</sup>1410 North West 12<sup>th</sup> Street, Corvallis, Oregon 97330, USA

<sup>3</sup>Geography Department, University of Nevada, 1664 North Virginia Street, Reno, Nevada 89557, USA

<sup>4</sup>Corresponding author, e-mail: tesque@usgs.gov

We are saddened to have lost a beloved herpetologist this year who was a friend and colleague to many of us. Phillip Anthony Medica passed away on 3 May 2020. Although most of us associate Phil with the Wild West (e.g., long residence in Las Vegas, Nevada) or his work in the arid Southwest, he was born in New York city and, in his youth, spent many of his early days chasing snakes in nearby New Jersey, which he reached by taking local buses. Phil's career and lifelong friendships were influenced during high school by herpetological programs sponsored by the American Museum of Natural History. His fascination with field studies committed him to the study and conservation of reptiles for nearly all of his 79 y.

Education and early career.—Phil's professional career began in 1959 as an undergraduate at New Mexico State University (NMSU), in Las Cruces, New Mexico. There he studied Game Management with an emphasis on Herpetology while employed as an undergraduate Research Assistant and graduated with his Bachelor of Sciences in 1964. Phil continued studying at NMSU where he was a graduate Teaching Assistant and earned a Master's in Science in Herpetology in 1966. In 1966, Phil enrolled in the Ph.D. Program at Brigham Young University to study with Wilmer Tanner in the Department of Zoology. At the same time, he was employed to work on herpetological research projects during the International Biome Project at the Nevada Test Site (NTS), where he associated

with herpetological and ecological luminaries such as Don Tinkle and Janice Beatley, respectively. One of Phil's aspirations was to complete a Ph.D. on the Longnosed Snake (*Rhinocheilus* spp.), which he remained interested in throughout life, but his career changed, and other opportunities arose.

UCLA and the Nevada Test Site.—Phil soon became a Staff Research Associate with the University of California - Los Angeles (UCLA), Laboratory of Nuclear Medicine & Radiation Biology. He was stationed at the former Nevada Test Site (NTS), Mercury, Nevada, from 1967-1981 (NTS is now known as the Nevada National Security Site). Phil worked with Ecologist and Statistician Fred Turner and Physiologist Ken Nagy on many species at and outside the NTS, including seminal studies on the Flat-tailed Horned Lizard (Phrynosoma m'callii) and the Colorado Desert Fringe-toed Lizard (Uma notata). Also, Phil gained even more active involvement with the herpetological community as the Treasurer of the Herpetologists' League from 1975 to 1979. Phil took great pride with his participation with that group and worked hard to ensure their strong sustainable financial footing, which he would eventually tell you about if you took long car rides with him.

**Professional associations and consulting work.**—
From 1980 and through his career he also served as a member of the Tortoise Specialist Group, International Union for Conservation of Nature and Natural

Resources/Survival Service Commission. Starting in 1984, Phil also functioned as a lifetime Research Associate to the Division of Herpetology, Museum of Natural History of Los Angeles County, Los Angeles, California, where he deposited many of the specimens he collected throughout his career. From 1981 to 1987, Phil was a professional biological consultant working on a variety of different projects throughout the U.S. Southwest, and then returned to the NTS to work for Reynolds Electric and Engineering Co., from 1987 to 1992, and during that time he became certified as a Senior Ecologist by the Ecological Society of America.

Focus on Desert Tortoise research.—In 1991, the Mojave population of the Desert Tortoise (Gopherus agassizii) was listed as a Threatened Species and protected by the U.S. Endangered Species Act. Then, there was a need for qualified senior ecologists of Phil's integrity and character to lead conservation efforts for the tortoise, which he did for the rest of his career. In 1993, Phil was hired as an Ecologist by Sid Slone at the U.S. Bureau of Land Management (BLM), Las Vegas, Nevada, to lead their burgeoning conservation ecology program. Only a year later, and much to the chagrin of his supervisor, Phil was drafted into a new federal research agency, the U.S. National Biological Service (NBS). While his job did not change much and he remained in the same office at BLM, Phil was invited to join the Desert Tortoise research team of the U.S. Department of Interior and was in this position from 1993 to 1997, and his title changed from Wildlife Biologist to Research Wildlife Biologist. In 1997, NBS was transferred into a research unit of the U.S. Geological Survey (USGS).

Recovery efforts for the Desert Tortoise.—By 2000, the U.S. Fish and Wildlife Service (USFWS) opened a new position for a Desert Tortoise Recovery Coordinator and Phil moved into that position where he initiated and coordinated range-wide population monitoring across the Mojave Desert. In 2005, Phil took a new position as a Senior Ecologist at the U.S. Geological Survey to co-lead a large research project coordinating the translocation of Desert Tortoises in association with the Ft. Irwin National Training Center, USFWS, and BLM. In 2013. Phil officially retired and opted for *Emeritus* status with the USGS. Since then and until days before his passing, Phil worked diligently on several research projects and assisted USGS co-workers with plans for a new research lab. At his passing he was finishing a note about his previous work at the NTS on the effect of gamma radiation on the Banded Gecko (Coleonyx variegatus) in the Rock Valley Plots. Phil also was managing data and checking records for a long-planned book on the Reptiles and Amphibians of Nevada with several of his recent collaborators. We hope his legacy will continue when that major effort is published.

#### FAMILY FIRST

Discussion of the life and times of Philip A. Medica would not be complete without mentioning his family. The other opportunities mentioned in his early career included marrying his wife Gloria and raising their wonderful family. Phil was a devoted husband and father, and his family came first. Likewise, they were all very understanding of his other passion in life: the ecology of herpetofauna and mentoring herpetologists. They welcomed many a Herper or visiting scientist into their home and treated them all like family.

#### **E**PILOGUE

To us, Philip Medica represented an experienced scientist with maturity few have to see the big picture. Yet he was steadfast, thoughtful, and reliable. He was a highly productive scientist (see Supplementary Information for publication record), including many quantitative studies on desert lizards unmatched to this day. Phil also was author of a training manual (Medica et al. 1971) that is a model of how to set up a long-term research study. His grace and patience led him to mentor a new generation of desert biologists. Phil was also a quiet patriot (in the original senses of the word) who worked calmly on national security issues in the post-cold war world that only decades later would his colleagues even comprehend. Phil was the kind of guy that folks think of when the going gets tough and wonder "what would Phil do" because he had the highest standards for being respectful, dependable, honest, and getting the job done, and everybody who met him knew it.

#### REMEMBRANCES

Ken Nagy, University of California, Los Angeles.— Phil Medica and I met shortly after I obtained a faculty position at UCLA in 1972 in the Laboratory of Nuclear Medicine and Radiation Biology, where Phil had a research position to do herpetological studies at the Nevada Test Site (NTS). We hit it off immediately and began discussing ideas for collaborating on studies at NTS, blending his astounding field smarts about desert reptiles with my ecophysiological skills and fascination about desert herpetofauna. Phil had already been doing long-term field projects on lizards and tortoises at NTS with Fred Turner, so it was an ideal opportunity for me to join in to add long-term physiological studies on free-living animals. Together we studied Side-blotched Lizard, Whiptail Lizards, and Desert Tortoises and were able to publish annual (tortoise) and lifetime (Uta) itemized resource (food, water, and energy) budgets for these species while living in their natural habitats. Phil's incredibly detailed knowledge of the biology (especially population biology) of desert herpetofauna really enriched our discussions and fueled our creative energies and research ideas. His dedication and enthusiasm for herpetology were invigorating and amazing, and his transition leaves a void in our hearts.

C. Kenneth Dodd, Jr., U.S. Geological Survey (Retired) and Florida Museum of Natural History.—I did not have the privilege of working with Phil Medica in the field, although I have heard he was an excellent naturalist. We first met at the Desert Tortoise Council meetings during the tumultuous days prior to acceptance of the fact that tortoises were declining throughout their range, and that something needed to be done. Despite the factions, Phil offered candid opinions without the emotion that sometimes surrounded the issues, particularly on grazing and population status. discussed questions and approaches at the meetings and in frequent correspondence in the days before the internet. Phil was not just a tortoise or lizard researcher, although he wrote perhaps the earliest manual on lizard field research techniques, but a lover of the desert and its vast beauty. I last met Phil in 2016 driving up the dusty road to Bayard Brattstrom's Horned Lizard Ranch in Arizona. We had only a brief meeting, but Phil was as he always was, thinking about the desert, the tortoise, and conservation. He will be missed by all those with whom he interacted.

P. Stephen Corn, U.S. Geological Survey (retired).-I first met Phil Medica in 1984 when I accompanied Bruce Bury to the Nevada Test Site to recapture marked Desert Tortoises in the enclosures used to study radiation exposure that Phil had helped Fred Turner set up in the 1960s. When I began research on tortoises in 1990, Phil was always ready to offer assistance and he was a valued co-investigator on studies of grazing effects and population status. Phil's love for herpetology and the natural world is legendary, but it was his humanity that stands out most to me. I have never met anyone who was so willing to help with whatever one needed. Examples are too numerous to do justice here, but he and Gloria welcomed me to stay at their house on most of my trips to Nevada; Phil provided my wife Janelle with locations and help in trapping kangaroo mice for her dissertation research; and from his (in)famous garage/archive produced field notes from Fred Turner's dissertation research in Yellowstone National Park that greatly aided our studies 50 y later. Most tellingly, I have never heard anyone utter a single derogatory word about Phil. He was a friend to all, and in the often-contentious world of tortoise research, that was not a small accomplishment. He is sorely missed.

**Brian T. Henen,** Marine Corps Air Ground Combat Center, Twentynine Palms.—Phil embodied brilliance,

truth, compassion, patience, generosity, honesty, openmindedness, and the pursuit of a full life. I quickly noted these traits as a graduate student at UCLA when Phil worked with Fred Turner and Ken Nagy on Desert Tortoises, Side-blotched Lizards, and many other species. It was Phil, Fred, and Ken's seminal herpetology studies at the Nevada Test Site that lured me there seeking a research site for my dissertation. These projects helped me formulate, answer, and publish my doctoral research on Desert Tortoises. I continue to marvel at the keen biological insight, practical field methodology, and eloquent, insightful writing of numerous scientific papers spanning behavior (e.g., tortoise drinking and tool use), growth rates, reproductive ecology, and physiological ecology. I continue to find precious gems in these papers.

Phil was the epitome of patience and tolerance and helped guide my career development. He always enjoyed instructing students and colleagues. Our paths crossed repeatedly after our UCLA days, and we continued communicating to pursue understanding and conservation of Desert Tortoises, work that he continued even when retired at the USGS. In 2015, I stood happily with Phil as we won the Robert C. Stebbins Research Award from the Desert Tortoise Council. I would not have been there without Phil. Phil is a star that leads us forward in biology, conservation, and good will.

Kimberleigh Field, U.S. Fish and Wildlife Service, Desert Tortoise Recovery Office.—Following a paper map and written directions, I found my way from Montana to Phil Medica's office in Las Vegas some 24 y ago. I was one of eight recent college graduates that Phil had selected to work on his field crew that season. Although I had no experience working on Desert Tortoises or arid lands, Phil was welcoming and provided an opportunity to learn under his mentorship, as he did for so many young, inexperienced, aspiring biologists. That season, Phil taught us about conducting field work safely in the Mojave Desert, surveying for and processing tortoises, and much more related to desert ecology. I am unsure that any of us were bold enough to use his swing-it-between-the-legs snake catching technique (excluding rattlesnakes), but we flocked to his recommended hole-in-the-wall Italian restaurant. He was a wealth of knowledge and always had a story to share. Also, Phil always had kindness and compassion to share. In situations where colleagues became redfaced and negative, Phil remained kind and calm. I feel fortunate that I could continue to walk into his office as the decades passed. I hope that he knew how many people he influenced and how much conservation of the Mojave Desert benefited from the research that he, his colleagues, and his mentees undertook. May he finally have lots of Gila Monster sightings in spirit.

Roy Averill-Murray, U.S. Fish and Wildlife Service, Mojave Desert Tortoise Recovery Office.—I was deeply saddened to hear of Phil's passing. He was an amazing person and one of the kindest people I know in his field. I personally owe Phil a lot in my current position. He went out of his way to encourage me in my professional advancement and was always available to assist with anything I needed. He was always a pleasure to work with and will be missed.

Michael Burroughs, U.S. Fish and Wildlife Service (Retired).—Phil always enjoyed sharing his knowledge and experiences. His enthusiasm for the flora and fauna of the Mojave Desert was contagious and inspired many upcoming biologists to become involved in desert conservation or pursue careers in the field. I met Phil in the early 1990s when he was a Research Wildlife Biologist at the U.S. Bureau of Land Management. During the upcoming years, I was fortunate to go in the field with Phil, visiting countless sites throughout the Mojave. My fondest memories with Phil are from field work at the Rock Valley study site on the Nevada Test Site. Phil took great pleasure describing the history of the site to field volunteers gathered around him during a lunch break from searching for tortoises. Phil always had an interesting story to tell and many times, I could envision what it was like to work on a lizard or tortoise project there in the mid-1960s. During his time with the USFWS, Phil brought people from a wide range of backgrounds and interests together to accomplish tortoise conservation. Phil was highly respected by all and will always be fondly remembered.

Saethre, Phenotype Screening Corp, Knoxville, Tennessee.—I began a long association with Phil when I started working as a field tech at the Nevada Test Site (NTS) with the Basic Environmental Compliance and Monitoring Program (BECAMP) in 1988. Phil worked for the contractor Reynolds Electrical and Engineering Company. Temporary summer hires were employed through the University of Nevada Las Vegas (UNLV), and I was fortunate to snag a summer position after my first year of graduate school at UNLV. I moved to Las Vegas in 1987 with my spouse and he took a job at NTS. We were both born and raised in Minnesota, so the desert was not familiar to us. Getting paid to work outside proved to be so enjoyable that I ended up working the next summer as well. When a Staff Research Associate position opened up though the University of California at Los Angeles, I hopped on board full time. Working with Phil was a major draw. He had the patience and willingness to pass on his knowledge to anyone willing to listen. Warning you to "Shake out your boots in case there is a spider hiding in it" was part of his safety briefing. "Don't hit the wrong nail with that hammer" was also heard a lot.

I was initially hired to help out with the lizard studies, which was all new. I can say that Phil taught me everything I know about noosing lizards, measuring snout-vent length, how to tell males from females, and gently palpating females to check for yolk follicles or eggs. From hatchling Side-blotched Lizards to chunky Chuckwallas, we did them all. The first time I was able to successfully snare a fast-as-a-cheetah Zebra-tailed Lizard with my cobbled together exceptionally long pole, Phil bought lunch. Phil also was in charge of the small mammal studies, so I became an expert in setting a Sherman trap light enough to catch a 5 g mouse. If you did not have your own nickel to test the trap, Phil always had one.

The NTS also had great habitat for Desert Tortoises and Phil showed us all how to carefully handle and take standard measurements. When Phil first took me to the Rock Valley fenced plots to look for tortoises, he had already been familiar with these marked animals for around 20 y. He knew where they usually hung out and even called one the pretty girl. We tried to measure and photograph them at least once a year. I can confidently state that Phil radiated energy when working out in the field.

Field work at the NNSS started early and often ended late if we were baiting rodent traps. It also involved lots of travel time to the study plots. All of those were times when Phil would fill the silence with a tidbit of his experience. At the end of the day we would hear that three-word declaration from Phil: "It's Miller time!" Although a pub/bowling alley and steak house were included in the facility amenities, "Miller Time" often meant our work was done and we could go to the dormitories, catch a shower, and get some sleep before waking up before dawn to start lizard or small mammal censuses.

Brad Hardenbrook, Nevada Department of Wildlife.-When asked to share a remembrance of Phil Medica, I found myself flooded by so many it was difficult to single out one. The depth of how enriched those of us he knew as colleagues, friends, and acquaintances is lasting in ways evoking a heartfelt appreciation of his professionalism and quality personality. Every time I pass a flattened snake or lizard on a roadway, I hear him say, "Oh, a spatula special." Phil had a knack of spinning a positive and sometimes subliminal undertone of relevance when sharing his widely varied life experiences. In a professional venue or conversation over lunch, you were likely to hear some savvy words from observation or experience. Even the seemingly smallest suggestion was a gem to hang onto for it invariably came in as a handy consideration in the future. An inter-agency technical discussion on monitoring regional Mojave Desert Tortoise populations in the early 1990s was Phil's brief mention of the utility

of passive integrated transponders for mark-recapture applications. The thought may or may not have been an original idea, but it was an available technology with promising potential. Phil seemingly was born with the energy and ability to keep his professional and personal matters in order. How many of us found out we had commonality in knowing Phil? I am sure some lasting relationships ensued. I do recall his keeping a lot of notes and would quickly write down a thought, often on a napkin to illustrate, or before "CRS" struck again. I will always smile thinking of the trip to Kalamazoo Creek with him, his son, and Friend (all named Phil); subliminal? He once confided that he could never see himself retiring from his scientific pursuits. In my estimate, he achieved that vision, and he continues that passion in all of us in some way.

Robert H. Webb, U.S. Geological Survey (Retired), Owner Aridlands Greenhouses.—I first met Phil Medica in 1978 at the NTS. I was interested in re-measuring the Wahmonie ghost town, and Phil seemed interested in connecting me with Janice Beatley. Phil helped with our re-measurements, provided some logistical support, and we got the job done. I mistakenly thought I might never see him again, but that Janice Beatley contact changed everything, as well as Phil's professional journey that eventually led to employment with the U.S. Geological Survey. We again found ourselves face to face in Las Vegas, planning on a project to re-measure Beatley's perennial vegetation plots at the NTS in 1999-2002. Phil knew the ropes out there and guided me and my crews through the craters, sometimes literally, to get the job done. I interacted with him guite often, helping him re-measure his BECAMP (Basic Ecological Compliance and Monitoring Program) plots that in some cases overlapped with the Beatley's plots. Lots of field time with Phil, all on NTS, lots of stories fueled by a few beers in the accommodations at night. Phil and I had one final thing in common: we retired from USGS on the same day, 31 May 2013. I spent that day, in part, with Phil in Las Vegas. It was one of the last times I had the pleasure of seeing him.

Kristin H. Berry, U.S. Geological Survey.—I became acquainted with Phil Medica in the 1970s and subsequently enjoyed every one of our conversations. Always courteous and professional, Phil never had harsh words for other biologists and scientists. Among his many publications, his long-term studies at the enclosures in the Nevada Test Site on growth and longevity of Desert Tortoises will remain as an important legacy for the species. At heart, Phil was the penultimate field biologist and a fabulous catcher of lizards.

Llo Stark, University of Nevada - Las Vegas.— Phil Medica was a family friend, colleague, mentor, and supervisor to me. Perhaps more than anyone else, Phil was responsible for developing my career in biology. He invited me to work as an undergraduate intern at the NTS, which gave me an insight into the life of a field biologist. He was the only biologist I knew when I relocated to Las Vegas and in a short time I was volunteering under him on his studies of the Desert Tortoise. Then he introduced me to other biologists/ecologists at UNLV and the Bureau of Land Management, which resulted in the discovery of a new plant species. My family and I were touched when he invited us to a July 4th gathering of his immediate family. Without his assistance, I doubt I would have received a job offer from UNLV, but more than that, I came to value Phil as the generous, kind, compassionate, and hard-working individual. I miss him dearly.

Rick Castetter, Naturalist, Las Cruces, New Mexico.—To this day I cannot see a snake on the road without thinking of Phil. I cannot recall a time when he did not stop for a snake on the road to Rock Valley (NTS) study sites). Meeting Phil was a defining and pivotal moment in my life. I was barely getting by back in the summer of 1975, and then one day, the Medicas showed up on their 4th of July vacation to Las Cruces, New Mexico. It changed my life completely. Phil took me on a short field trip along the Rio Grande River where he showed me his Master's thesis area, now a state park. A few weeks later Phil called with a job offer. It was the most satisfying job I ever had! The educational rewards at NTS were huge and paid handsomely. My time at NTS was the most unique experience of my life. Phil was just the best boss, mentor, and confidant. He treated the least of us like we were colleagues, not merely the hired help. I saw Phil as a leader because he was so positive and genuine towards everyone and especially to us "kids." In all my time there I never saw Phil express anger, reprimand, or speak ill of anyone. He was an excellent boss and everyone respected Phil.

Kristina Drake, U.S. Geological Survey, Research Wildlife Biologist.—Philip A. Medica was a legend in the desert long before his recent death. I could provide pages of scientific contributions that resulted from his research, collaboration, and mentorship with hundreds of scientists and managers; however, I think it is more important to highlight the patience, compassion, and generosity that he showed everyone. He made us better scientists, ecologists, and human beings just by following his example. His ability to retain infinitesimal details about ecology and wildlife over his lifetime was unique. He was always ready and usually shared his stories and experiences. In hindsight, his stories and humor provided some of the best field days in my professional career. Phil was a life-time advocate for improving the conservation and management of tortoises, native herpetofauna, and small mammals. The best example I can provide is his 47-y research study on the growth and longevity of tortoises in Nevada. Can you imagine having the grit and dedication to devote almost 50 y to a single research project? The weekend following his death, I shared with my colleagues "that everything in the desert reminded me of Phil." One promptly replied "Phil is the desert." It was truly an honor to have such a wonderful mentor and friend for so many years.

Kenneth Nussear, Department of Geography, University of Nevada, Reno.—I had the privilege of working with Phil for many years, and in many capacities. As a new graduate student in 1995, I recall the excitement of meeting him; an author that I had read so many papers by. At that time, he had just moved from BLM to NBS, and his office at the BLM building was literally in a closet that also had a mop sink in it. Phil never blinked an eve but was hard at work on the task at hand. Phil was designing and implementing a large Desert Tortoise translocation project to find a useful fate for the animals displaced by human expansion in southern Nevada. Phil later assembled a small army, procured buildings, transportation, field equipment, and even a houseboat to use as a research station at Lake Mead National Park. Phil's ability to orchestrate all of this was truly inspirational. I was one of the students on the project, and Phil mentored me throughout my Ph.D. program teaching me field methods, personnel management, logistics, and the natural history of his desert. I served with Phil from then on, working on his FWS monitoring implementation team, the Recovery Plan Assessment, and later working with him as a colleague at the U.S. Geological Survey. Phil continued field work for as long as I worked with him, x-raying tortoises, annual surveys of the Rock Valley plots at NTS, herpetological surveys, teaching and mentoring new biologists (and old ones), walking Desert Tortoise transects and plots on everything from USFWS surveys, to the Fort Irwin Desert Tortoise K-9 (dogs) experiment, and translocations. In my later years at USGS I was assigned to be Phil's supervisor, as I had what Phil called my "union card" and he did not. I think this may have been his only regret, but it never slowed him down, not for a second. I never had a stronger feeling of Imposter Syndrome than during that time. The truth is he mentored me even then, never mind the paperwork and signatures. I truly would not be where I am today without Phil's guidance, patience, and knowledge. He gave endlessly and unselfishly to all of us. Thank you, Phil. You are dearly missed and will never be forgotten.

Linda Allison, USFWS, Desert Tortoise Recovery Office.—Phil was tasked with heading the recovery

effort for Gopherus agassizii after the recovery plan was written in 1994. He shepherded in the range-wide monitoring program that I currently coordinate. He organized workshops first with scientists, then with agency leaders to grow agreement on the type of surveys that would best to describe population trends that would be the basis for any delisting consideration. That was just a portion of his work! When I began in my position years ago for this long-term program, I called him to tell him how impressed I was by the amount of thought and effort he had put into the program. On the one hand, he was vetting competing survey protocols. On the other hand, he was rallying and cajoling agency partners to adopt and fund this ambitious project on 25,000 km<sup>2</sup> of public land, and he worked out the logistics to put the field teams on the ground those first few years. Because he knew the current monitoring project, we had a comfortable and supportive ongoing conversation over the years.

David J. Germano, Department of Biology, California State University, Bakersfield.—I first met Phil in 1981 when he interviewed for a position with the environmental company I worked for in Santa Barbara, California. I had finished my M.S. at the University of Arizona only a few years earlier and I was excited to meet Phil because I had read and cited many of his lizard publications. We sat on a lawn at lunch time and I think I gushed a bit too much about how I admired the studies he had done. This was exactly what I wanted to do. He ended up not taking a job with the company and a few years later I went to work on my Ph.D. I then saw Phil in 1984 when I met with Bruce Bury and Steve Corn to recapture marked Desert Tortoises in the enclosures at the Nevada Test Site. Bruce was on my doctoral committee and I made use of known age tortoises to check the accuracy of scute rings. Phil was a great help. I saw Phil again in the early 1990s when we met at the Desert Tortoise pens that David Morafka had constructed near Ft. Irwin in the Mojave Desert. Phil was always such a kind and warm man, and to this day I think of him as one of my inspirations for biological research.

Acknowledgments.—We thank the many friends and colleagues of Phil Medica for providing personal and professional information for this review.

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### Herpetological Conservation and Biology

Please note these links:

Supplemental Information: http://www.herpconbio.org/Volume\_15/Issue\_2/Esque\_etal\_2020\_Suppl.pdf

Medica et al. (1971): http://www.herpconbio.org/Volume\_15/Issue\_2/Medica\_etal\_1971.pdf



Phil Medica (second from left) hosted the first organizational meeting of Herpetological Conservation and Biology at the U.S. Geological Survey office in Henderson, Nevada, USA, June 2006. Standing left to right: Stan Trauth, Phil Medica, R.B. Bury, Malcolm McCallum, Roger Luckenbach, and Raymond Saumure. Seated left to right: Gwendolynn W. Bury and David J. Germano. (Photographed by Stan Trauth).



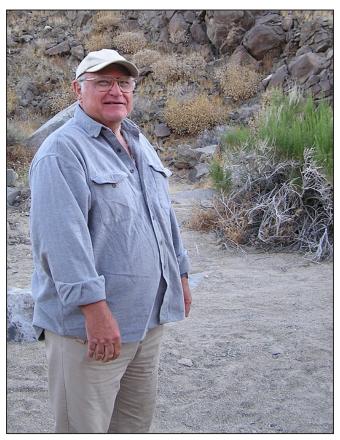
Phil Medica (right) enjoying a talk with Glenn Stewart at the meeting of Herpetological Conservation and Biology in Portland, Oregon, USA, August 2009. In the background next to wall is Hart Welsh and Amy Lind, then Nancy Karraker and David Bradford. (Photograph by R. Bruce Bury).



Phil Medica and Doug Threloff (USFWS) exiting a UH 60 Blackhawk, scouting suitable translocation areas for the Ft. Irwin Translocation project in the Mojave Desert of California. (Photographed by Ken Nussear).



Phil Medica x-raying a Desert Tortoise in Bird Spring Valley, Nevada. (Photographed by Ken Nussear).



Phil Medica in 2005 on the Fort Irwin project: ready to embark on tortoise surveys. (Photographed by Ken Nussear).



Phil Medica (center) with Todd Esque (left) and Steve Wessels (right, standing) in 2005 on Fort Irwin taking a break in the shade after conducting 15 km of transect surveys for Desert Tortoises. (Photographed by Ken Nussear).