



Joe Mitchell – An Unfinished Life

Craig Hassapakis and the ARC team

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Abstract.—Personal contributions on the life and career of Joseph Calvin Mitchell (1948–2019) by family members and colleagues: Susan C. Walls, Susan Johnson, Jill A. Wicknick, Valorie Titus, Carola A. Haas, and Kurt Buhlmann.

Keywords. Influence, contributions, farewell, history, North American herpetology, researcher, turtles, Virginia

Citation: Hassapakis C. 2020. Joe Mitchell – An Unfinished Life. *Amphibian & Reptile Conservation* 14(3) [Special Section]: i–xiii (e280).

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Accepted: 30 December 2020; **Published:** 17 August 2021

I met Joe when the idea for creating a herpetology journal devoted exclusively to conservation was just being born, back in 1995. Joe was very supportive of the idea and lent his prestigious name to our fledgling journal as a member of the advisory board. I still remember standing in a circle of professors at a conference a quarter-century ago (1995), early in the development of the journal, and their excitement that ARC was to be a full-color scientific journal, since such a “luxury” was exceedingly rare in those days. Joe’s paper was the first scientific paper published in the journal:

Mitchell JC, Wicknick JA, Anthony CD. 1995. Effects of timber harvesting practices on peaks of Otter Salamander (*Plethodon hubrichti*) populations. *Amphibian & Reptile Conservation* 1(1): 15–19 (e3).

His submission of this article to ARC attests to Joe’s willingness to help and risk his reputation by going with a new journal with lofty ideals.

Joe continued to lend advice and review papers for ARC over the years as the journal continued to grow in prominence. One feature of Joe’s character that I could always count on in my collaborations with him through the journal was that no matter how busy his schedule was, Joe always came through with very insightful and helpful manuscript reviews, which always impressed me and spoke to his commitment to conservation and the journal as well.

An example of one of my last communications with Joe, which neatly summarizes his willingness to help and the many responsibilities which must invariably come with such openness, is his response to a manuscript I had just sent him to review which was packed full of behavioral field observation data:

Monday, February 11, 2019 4:45 PM

OK, Craig. I downloaded them all in a folder. Data-rich is an understatement. I’ll get to it as soon as I can. Lots on my plate.

Joe

It was commented to the editorial team that Joe was “one of our best reviewers for American reptiles and amphibians!”

Joe left this world all too soon and he is sorely missed by all who knew him. The entire ARC team wants to thank Joe for all his dedication and help in getting the journal *Amphibian & Reptile Conservation* started and helping us to improve the submitted manuscripts over more than two decades. We are forever grateful and know that Joe’s spirit will continue on into the future as he was an inspiration to all of us. While Joe’s contributions to natural history and herpetology have been reviewed in previous memorials, several of his family members and colleagues have submitted some more personal thoughts on their memories of knowing and working with Joe over the years.

Susan C. Walls (Joe's wife)

Fort White, Florida, USA

Tuesday, 2 July 2019, began like any other day for Joe Mitchell. I left home early that morning, before he awakened, to attend an out-of-town meeting. When I got home in the late afternoon, though, it was easy to reconstruct how his morning had unfolded. He had cooked sausage for breakfast, and only had half a cup of coffee—the other half would be waiting for him on the kitchen counter when he got home. He only sent one email that morning, and it was about an undergraduate he was mentoring—clearly something that was important to him since he tended to that before doing anything else. He then loaded the bed of his pickup truck with our recycling bins and made a run to the local recycling center to drop it all off. On his return trip, he had planned to stop at the local bank to deposit a check—the check and a deposit slip were still on the passenger seat of his truck when I retrieved it the next day from the tow yard. At some point before leaving, he snapped a couple of pictures on his cell phone of two of our dogs, curled up in the new “fox hole” they had just dug in the yard. He most likely was amused by their creative digging and he would have chuckled as he shared the pictures with me later that night when I got home. After getting the dogs back in the house he left for the recycling center, only “dummy locking” the gate—something we did out of laziness when we knew we were just stepping out for a moment. He obviously didn't plan to be gone long and was probably already thinking ahead to the next item on his to-do list for the day. But Joe never made it back from

the recycling center; something blew out of the bed of his pickup on his return trip home. He pulled over and darted out into the highway to get it. And, in the blink of an eye, he was gone. The driver of a semi-truck approaching from behind swerved at the last minute but couldn't avoid impact. What started out as just an ordinary day ended in tragedy, loss, and grief for Joe's family and friends, the herpetological community, and me.

The herpetological community knew Joe for his stature within, and contributions to, the field of herpetology. Joe was a loyal member of The Herpetologists' League, The Society for the Study of Amphibians and Reptiles, The American Society of Ichthyologists and Herpetologists, and the Virginia Herpetological Society. He was our esteemed colleague, a herpetologist extraordinaire, and a gentle soul. But he was so much more. He was a loving and devoted father and grandfather, brother, uncle, cousin, brother-in-law, and husband. His family meant the world to him, as did his colleagues, whom he once referred to as his “tribe.” Joe was also a Marine—as he said frequently, “once a Marine, always a Marine.” He was very proud of his military service during the height of the Vietnam War. If he ever saw another Marine veteran when we were out, he greeted them with “Semper Fi, brother. Semper Fi.”

Joe was also a mentor to many young people, past and present. Over the last several years he had thoroughly enjoyed working with Jerry Johnston of the Santa Fe College in Gainesville, Florida, and his students working on turtles in the Santa Fe River system near our home in Columbia County, Florida (Fig. 1). Jerry tells me that Joe was actively mentoring many of them, and I am so glad that these young people had the opportunity to get to



Fig. 1. Joe showing Santa Fe College students how to count growth rings in *Pseudemys concinna* as part of a long-term demographic study of river turtles.



Fig. 2. Joe as a high school senior with his award-winning pair of mahogany lamps and a pet Mole King Snake, *Lampropeltis calligaster*.

know him and learn from him.

Joe had many interests outside of herpetology as well. Since high school he had a strong interest in wood-working. In his high school senior year, he made a pair of mahogany lamps (among other pieces of furniture; Fig. 2). Their intricate and unique spiral design took seven weeks to finish and involved lots of hand sanding and finishing, but his efforts won him first place in the senior wood turning class at the county and state industrial arts shows. The summer after he graduated from high school, he apprenticed with a furniture maker and intended to

pursue that career path but ended up joining the U.S. Marine Corps on his 18th birthday in August, 1966. In the recent few years before his death, Joe was starting to get back into wood-working again in his home shop.

Joe was a true bibliophile. His expansive herpetological library (Fig. 3) was admired by many, but his literary interests were not limited to just herpetology. In addition to his herpetological book, journal, and reprint collections, Joe collected books on natural history, military history, leadership, and Native American culture and philosophy. Joe’s allegiance to the Marines fueled his interest in military books and, from a young age, he had been intrigued by Native American history and culture. Joe was not a religious person but he was very spiritual, and he aligned himself with many Native American beliefs and philosophies. In his later years, Joe developed a strong interest in leadership, and his library holdings indicated that he studied a variety of leadership approaches. In addition to books, Joe collected high-end custom-made knives and baseball caps (especially those bearing Marine Corps emblems), and he was passionate about bluegrass music—the more energetic the banjo, the better! Joe once took banjo and voice lessons with the hopes that he could play bluegrass himself, but he never became proficient enough to do so.

Joe described himself as being “product-oriented” and he was a prolific writer. He also thoroughly enjoyed the editorial process. At the time of his death, he was co-editing *Snakes of Arizona* (with Andy Holycross)



Fig. 3. A portion of Joe’s herpetological book collection, housed in barrister bookcases willed to Joe from Roger Conant. The bookcases originally belonged to Roger’s father.



Fig. 4. Joe at work at his desk with his best canine friend, Jake, close by.



Fig. 5. Joe and Jake in 2011.

and he had a long list of planned book projects and research articles lying in wait (most notably a book on the herpetology of the Delmarva Peninsula with Roger Conant). At age 70, Joe was far from ready to settle into the more sedentary life one typically associates with “retirement.” When he wasn’t working, he enjoyed relaxing on his 6-acre wooded property in North Central Florida with his best canine friend Jake, a rescued stray, never far away (Figs. 4, 5).

Joe always cautioned me not to ruminate on things, so I know that he would not want us to dwell on the unspeakable tragedy of his loss. Joe cheated death ten years earlier when he had a heart attack that required bypass surgery; sadly, however, he wasn’t able to cheat death a second time. Joe had told me once that, upon his death, he wanted a party with lots of bluegrass music rather than a morose funeral. I honored his request. And, as hard as it is to do sometimes, I think that Joe would prefer that we celebrate his life rather than mourn his loss.

Semper Fi, Joe.

Susan Johnson (Joe’s sister)
Mechanicsville, Virginia, USA

It was fun, and sometimes a bit crazy, growing up with a future herpetologist...snakes and a few lizards were always part of our family. (For some reason we could not have a dog, but my parents OK’d the snakes!) At one point, Joe’s bedroom had a cot in the center and was surrounded by shelves of aquariums which contained mostly snakes and a few lizards. Our den had a large aquarium housing Joe’s Boa Constrictor while the utility

room had a shelf of preserved snakes in large jars. Yes, our family and friends thought this odd, and not just a little bit crazy. The credit for inspiring Joe’s passion for herpetology goes to our Uncle Cos, and kudos to our parents for allowing Joe to follow that passion at a young age. I really cherish the experience of handling and living with snakes and other critters as I grew up. Joe taught me to not fear them but to be in awe of them and the rest of our natural world.

Jill A. Wicknick
University of Montevallo, Montevallo, Alabama, USA

A solid man, not tall, stood at the back of his pickup. The Semper Fi sticker gave a hint at the physical exertion of the upcoming field work. With a flash of his broad, welcoming smile, Joe Mitchell was ready to get started.

The 16 km segment of the Blue Ridge Parkway where *Plethodon hubrichti*, the Peaks of Otter Salamander, has resided for five million years was my home for three autumn seasons of field research on competition and territoriality. Living in a 17’ travel trailer in a campground that was devoid of other humans on weekdays, I shared the area with a young black bear, a bobcat, and a park ranger who was either a poor shot or didn’t have the heart to kill a downed deer. This was the setting where I met Joe Mitchell in his territory: Virginia. He was happy to show it off, happy to mentor a graduate student, happy to be in the field; ear-to-ear-grin, whole-face-alight happy.

Joe and I had already met at the herp meetings, but this was our first time in the field together. We were in a high-elevation valley nestled between two nearby peaks: Sharp Top Mountain at 3,875 ft, and Flat Top Mountain at 4,004 ft. I was just starting my dissertation project and



Fig. 6. Joe's presentation at an NEPARC meeting on the reptiles and amphibians of Virginia's Civil War sites.

Joe had experience with the localities for my study. He also knew that the area contained high quality timber and was concerned about the effects of timbering on this vulnerable endemic. He helped me to get my project started, and he invited me to work with him examining the effects of timber harvesting on *P. hubrichti*. In the process, he nurtured my thinking about conservation.

While we worked at the Peaks of Otter, Joe showed me how to select research sites on a map and how to ground-truth them. Machete in control but flying, he created transects and taught me field methods. I think of him when I look at my own machete which hangs in my office.

Joe appears on my CV eight times, mostly from 1994–1997 and all related to *Plethodon hubrichti*. Our timbering publication, with C.D. Anthony, appeared in the inaugural issue of ARC which Joe was thrilled to be a part of—enthusiastic about the new journal's conservation focus and eager to publish in it. He talked a lot about publishing. He wanted to leave a herpetological legacy through his publications but he has left so much more. In addition to his manuscripts, he had a lifetime of teaching others while sharing his enthusiasm, his friendship, and his zest for life. The knowledge he passed on still continues its journey.

Valorie Titus

Keystone College, LaPlume, Pennsylvania, USA

Though it's been over a year, it is still hard to sit down and write this. I first met Joe in 2003 at a Northeast Partners in Amphibian and Reptile Conservation

(NEPARC) meeting in West Virginia. I was a very green grad student, in the middle of my Master's degree work on copperheads. He seemed quite amused by this young female Yankee trying to figure out the behavior of these snakes in Kentucky, and he was a very engaging and supportive person from the start. (He later encouraged me to submit the story of my first copperhead encounter for publication, but that's a story for another day!)

My next encounter with Joe was at the JMIH in Norman, Oklahoma in 2004. This was my first big meeting and my first ever presentation. He was so excited to introduce me to many of the other herpetologists and was just a networking encyclopedia. Since then, I had always looked forward to seeing Joe at conferences and meetings. My favorite ones were always the NEPARC and SEPARC meetings, where we could take the time to catch up over a good beverage. One NEPARC meeting in Virginia particularly stands out. Joe was our keynote speaker (Fig. 6), and he came in dressed like quite the southern gentleman and talked (in a very pronounced southern drawl) about the work he had done on various Civil War sites (while joking that Virginia should be considered a Southern state). He was always a joy to watch when he made presentations.

Joe was always ready for a good story or to offer some sage advice or encouragement. I knew that I could always send him an email with a question and get a quick reply. He was really integral in offering me support whenever I was struggling with a chapter in my dissertation or a publication. He always encouraged me to just keep on plugging away and keep up my enthusiasm. If it wasn't for Joe's influence, I would never have become so involved with PARC--and for that alone, I am exceedingly grateful.

Now, at this point in my career, while I am not much of a publishing academic, I have taken what I learned from Joe and my other mentors, and am applying it to teaching the next generation of undergraduates in the field of wildlife studies. I often try to think about what my own fears and trials were like—and what advice Joe would have given me if I were in the position of my students today. It gives me comfort knowing that his legacy will live on through me as an educator and mentor. Rest easy, Dr. Mitchell.

Carola A. Haas

Virginia Tech, Blacksburg, Virginia, USA

I first met Joe Mitchell in 1993, the year I arrived at Virginia Tech. I can no longer remember the exact circumstances, but I think Joe was in Blacksburg to meet with someone else at the university or to meet with Sue Bruenderman, who at that time was the Non-Game Aquatics coordinator for the Virginia Department of Game and Inland Fisheries (VDGIF). Someone must have thought it would be a good idea to connect Joe with a new faculty member who had an interest in amphibians, so I think Joe looked me up or stopped by, and somehow, we were introduced. I know that by then I'd heard his name several times as someone I needed to connect with.

I had originally been hired by Virginia Tech to work on non-game songbirds, but having landed in the southern Appalachians, I was eager to expand my research to include plethodontid salamanders, and an invitation to participate in a silvicultural experiment by colleagues in our Forestry Department had gotten me started on such a project. It quickly became clear that there was a greater need (and more funds) for research on the conservation and management of amphibians and reptiles in Virginia than for songbird work, and Joe was one of the few people currently filling that niche. At the time he was an adjunct faculty member at University of Richmond, teaching Biology courses at night and doing independent research and consulting work during the day.

Joe had been involved in the early studies of bog turtles in southwest Virginia, and was very concerned that conservation efforts for this species in the southeast needed to increase. Based on discussions he had with Kurt Buhlmann, he worked with Sue Bruenderman (VDGIF) and Alison Haskell (USFWS) to negotiate support for research on bog turtle movement and the importance of streams as movement corridors between isolated wetlands. I'm not sure how he managed to navigate the process of obtaining the always scarce "Section 6" funds before the species was listed, but Joe was often able to find ways to get folks to address work that he saw as urgent. The logistics of travelling from Richmond to southwestern Virginia to do this work were daunting, and so Joe approached me about collaborating on this project. I protested that I didn't know a thing about turtles, but

Joe assured me that he'd teach me whatever I needed to know about working with turtles and that my expertise on movement behavior and corridors was the perfect fit for the project. By that time Mike Pinder had replaced Sue at VDGIF, and together we embarked on the bog turtle research that I've continued on and off ever since.

Joe always welcomed me as a collaborator and colleague, and he encouraged me in my shift to herpetological work. As I was typing this just now, I happened to notice his *Reptiles of Virginia* book out on my side table, as I had been referring to it while working on a bog turtle manuscript within the last couple of weeks. I just looked to see what the inscription said, and found his prophetic words from October 1994: "maybe you are discovering that herps are just as exciting as birds" (Fig. 7). It would have been easy for Joe to try to stake out his territory, and treat me as a competitor rather than a collaborator, especially because his financial livelihood depended on continuing to get contracts for work. But Joe was consistently open and encouraging. I know he had plenty of conflicts over the years. Like most of us, he certainly wasn't immune to feeling like his toes were being stepped on, that he was being taken advantage of or snubbed, and there were plenty of people that got irritated at Joe too. But besides being passionate about the science, and the organisms, and the important work getting done, Joe cared deeply about people and was very invested in mentoring and supporting other herpetologists. Every time I spoke with him while I was

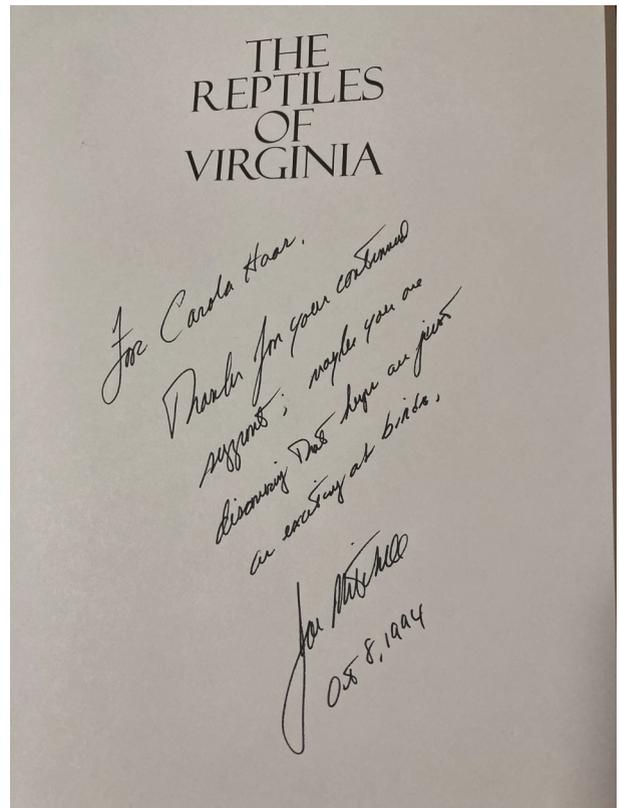


Fig. 7. Joe's inscription to me in my copy of his 1994 *Reptiles of Virginia* book.

untenured, he asked how my publications were coming along, and reminded me to make publishing my priority. He was a great mentor and source of support throughout my career.

Joe was committed to seeing work through to publication. Much of the contract work that Joe took on did not require the publication of results, but Joe was always adamant about collecting high-quality data and making sure it was available to others through peer-reviewed publications. His painstaking attention to detail, recording all the morphological and natural history information that he could, sometimes made field work with him slow. (I remember becoming hypothermic while sitting on the ground with him one February night at Maple Flats measuring all the ambystomatid salamanders that others were dipnetting!) He was dedicated to the profession in other ways as well, serving as an officer in local and national herpetological organizations, and always being willing to help with education and outreach.

I know that Joe had plenty of struggles with mental and physical health issues, many as a result of his military service. He worked hard to overcome or manage these struggles, and his willingness to acknowledge difficult circumstances and discuss his struggles helped normalize these challenges for others in the field. A driving force for Joe was always his family. His deep love for all his family members was so obvious from conversations with

him. He was a staunch ally to family and friends alike.

It was an honor and a joy to have worked with Joe, and I know that his contributions to herpetology and to conservation will live on.

Kurt Buhlmann

University of Georgia, Savannah River Ecology Laboratory, Aiken, South Carolina, USA

Some personal remembrances of a great mentor and friend, Joe Mitchell

I first heard the name, Dr. Joseph C. Mitchell, when I began my literature search as a new MS graduate student at Virginia Tech (VT, Blacksburg, Virginia), in the Fall of 1983. I was going to conduct a survey of birds, small mammals, amphibians, and reptiles in the newly designated New River Gorge National River corridor in West Virginia. I was just starting my search of the natural history literature so I could understand the distributions and state of knowledge of the herps I might encounter. I had recently finished my B.S. in Environmental Studies at Stockton State College in New Jersey (the state where I grew up), thus I was new to Virginia. Given that I was in the Fisheries and Wildlife Department at VT, it seemed likely that I should have been able to be quickly pointed in the right direction. However, in 1983, most wildlife



Fig. 8. Virginia Herpetological Society meeting, 1987.



Fig. 9. Whit, Kurt, and Joe, Aiken, South Carolina, 1995.

departments, including VT's which I loved being a part of, had almost no emphasis on herps, being focused primarily on game mammals and birds. However, one day I picked up an issue of *Virginia Wildlife* (Vol. 35, No. 4, [April] 1974) and it included an article on the Snakes of Virginia, with a fold-out color plate, written by Dr. Mitchell. After reading the article, I realized that perhaps this guy, who was associated with the University of Richmond, might be able to help me to become familiar with the herps of the Virginias. So, I wrote him a letter. Soon after, I received a fat manila envelope from Joe in the mail. It was filled with scientific reprints by him and other biologists which were related to my search for Virginia natural history knowledge.

Skipping forward a decade to the summer of 1985, while doing fieldwork in the New River Gorge, I decided that I should attend my first professional Herpetology Conference, which was a joint SSAR/HL meeting held at the University of South Florida, in Tampa. I drive down from Blacksburg in my old Chevy truck. I recall

removing the tailgate so that I would get better gas mileage, as I only had a few bucks for gas....

I met many herpetologists there for the first time, many of whom have become lifelong colleagues and friends. And I bumped into Joe for the first time. It was clear from our first discussions that both of us were excited about natural history, and in the fauna of Virginia in particular. Before the end of that SSAR/HL meeting, Joe had invited me to participate in his on-going Herp Survey project in Virginia, which would lead to the eventual publication of his *Reptiles of Virginia* (Mitchell 1994) book and many papers.

Joe took an interest in me as a young exuberant herpetologist in the making—and spent a great deal of time over the next 35 years as a mentor, colleague, and friend. Where I am going with this note is to provide a personal remembrance. My intention here is to capture memories and field trips, and to recognize Joe as the fine mentor and friend that he was. In the year since his passing, others have written tributes to Joe which



Fig. 10. Camping out in the old Shasta.

thoroughly highlight his professional accomplishments, and I cite those here for reference.

Several weeks after the 1985 Tampa meeting, Joe and I met with fellow herpetologist Chris Pague, Carnegie Museum scientists Ellen Censky and Jack McCoy, and Dr. Richard Hoffman in the southwest corner of Virginia to look for herps in the headwater streams of the Tennessee River—including the Clinch, Holston, and Powell Rivers, as well as a beautiful smaller stream named Copper Creek. It was if I had been transported to a different planet with the same basic types of animals, but the species were all new. Here, I had my first hands-on experiences with Hellbenders, Mudpuppies, Spiny Softshells, Striped Musk Turtles, Cumberland Sliders, Black Kingsnakes, and Zigzag Salamanders—all within a 3-day period! Now, I soon realized there was a downside to all this work with Joe. Joe was very much a student of museum series collections at the time, as were our Carnegie colleagues, and I was schooled in the value of series collections, but had a hard time handing over my catch knowing it was going into formaldehyde.

One of those afternoons, while turning rocks for Hellbenders in Copper Creek, I lifted a big flat rock, waited a second for the water to clear, and then my senses realized that I was looking at a beautiful greenish striped Common Map Turtle—the first I'd ever seen. My hand shot down into the water and closed around its shell, my right shoulder and the side of my face in the water. Joe was nearby and asked, “Did you see something?” I nearly hollered and lifted the little jewel to the surface, but then just froze and lowered it back to the stream bottom and stared down at it. “No, Joe, I thought I saw something, but I lost it in the current,” I said. I just could not bring that turtle up—my first of the species—knowing what its fate would be. I think it was perhaps sometime in the early 2000s—about 20 years later—when I confessed this story to Joe 😊. That was also long after Joe had stopped



Fig. 11. Building silt fences for Bog Turtles in New Jersey, 2003.

making series collections himself, and although both of our pickup trucks always contained jugs of formalin; they were used only for road kills that we refused to see otherwise wasted.

After the southwest Virginia trip in summer 1985, I don't think a month passed between then and 1992 in which I was not meeting Joe somewhere in the field in Virginia to look for herps—Mt. Rogers in the Blue Ridge to find Yonalossee and Shovelnose Salamanders, winter



Fig. 12. PARC Habitat Management Guidelines course taught at Arnold Air Force Base, Tennessee, 2007. Joe in center in front of tree. Photo by Mark Bailey.



Fig. 13. Accepting the Paul Moler Conservation Award, for the PARC Habitat Management Guidelines (left to right: Mark Bailey, Kurt, Jeff Holmes, Paul Moler, and Joe).

visits to a pond along the New River to find breeding Jefferson’s Salamanders, my introduction to the Virginia Herpetological Society and its members, looking for the Shenandoah Salamander on talus cliffs on a foggy night in Shenandoah National Park, searching for the elusive Chicken Turtles in Virginia Beach, or building drift fences at Prince William Forest Park just south of Washington, D.C. Joe gave me a set of maps for each county in Virginia so that I could accurately plot the locations of my herp finds, such as “3.2 miles South of Floyd on Rd. 8.” To this day, you could drop me on any little country road in Virginia, and I can quickly figure out where I am. Joe not only taught me Virginia herps, but I learned about Virginia natural history, physiographic regions, and culture.

On a return trip to southwestern Virginia, in 1986 I think, I recall asking Joe if he could pay for my gas or mileage or something. Joe responded that the grant from the Virginia Department of Game and Inland Fisheries did not have that much, but he would pay for the food on all the field trips. That sounded like a good deal to a starving grad student. Subsequently on that same trip, I got us thrown out of an all-you-can eat buffet restaurant, and I think Joe might have regretted the work-for-food-only idea after that. We joked about that incident for the next 30 years.

I graduated from VT with my Master’s in Wildlife Sciences in 1986 (with my thesis on River Cooters) and then had a few short-term wildlife jobs in Virginia, West Virginia, and New Jersey over the next year. These jobs included hacking bald eagles, radio-tracking snow-shoe hares, banding woodcock, and trapping wild turkeys, several of which were arranged by my major advisor at VT, Dr. Mike Vaughan. In early 1987 I had just written a proposal to work on Rio Grande Cooters in New Mexico with Charlie Painter, the New Mexico

State Herpetologist, and Joe called me. He thought he might get a grant from the US Forest Service to study the distribution of Cow Knob Salamanders in the George Washington National Forest—was I interested? It would be a for-hire job. Although I was sorry to turn down the project in New Mexico, the Cow Knob Salamander work with Joe would determine the trajectory of my career.

Joe and Chris Pague, Bob Glasgow, David Young, and I got to work building drift fences at high elevations in the George Washington National Forest. I recall going up there in April 1987 and promptly getting my truck stuck in snow. OK, so the salamanders were not out yet. But on 12 May 1987, we found our first one. We surveyed for salamanders for two years, and when Joe came up, we would camp out in my little Shasta trailer. I think together, Joe and I (with our academic backgrounds) learned how to interact with land management agencies and our survey work eventually resulted in the designation of the Shenandoah Mountain Crest Special Biological Area on the George Washington National Forest—a conservation victory that I know Joe was rightfully proud of.

While heading up the Cow Knob Salamander work, Joe included me on trips to the Blue Ridge Parkway to work with him on identifying Bog Turtle habitats along the parkway. We would meet at the sites, and find and mark turtles with a notching system that continues today.

When we went to Seashore State Park in Virginia Beach, Joe allowed me to have the newspaper story credit for trapping the Chicken Turtles. It was Joe’s project, but he let me have the spotlight and be interviewed for our work. Joe was always happy to help promote others, while he was often willing to remain in the background. And that generosity is a unique quality.

Joe also sent me with his colleague, Richard Hoffman (another great natural historian of Virginia), out to an unusual series of sinkhole ponds where we found an



Fig. 14. Tracey, John Byrd, and Joe at SEPARC, 2010.

isolated population of Tiger Salamanders.

In the winters of 1988–1989, I worked for Joe in his sprawling steampipe distribution room in the bowels of the Biology building at the University of Richmond. One night on my way back to Richmond from visiting friends in Blacksburg, a white-tailed deer and my 1972 Chevelle had an encounter near the site of General Lee’s surrender (during the US Civil War) in Appomattox. I loaded the deer into the trunk and made frequent water stops because of my leaking radiator, but I made it to Richmond. In Joe’s basement lab, I proceeded to butcher the deer that night. Joe arrived at 7 AM the next morning to find me with a disemboweled deer all over his lab floor. Although he did say some expletive like, WTF!, he then spent the rest of the morning showing me how to properly butcher a deer. We enjoyed many stews and roasts that winter at Joe’s family home, and he helped me get a legal tag for the deer from the Game Department.

My work with Joe, and the education he provided about Virginia natural history, led me to successfully land my first “real” job with The Nature Conservancy and the Virginia Division of Natural Heritage in 1989. I know Joe had some behind-the-scenes influence which resulted in me obtaining that job, but it suited me perfectly. I knew Virginia well because of Joe, and I was eager to learn about other groups of animals too: like dragonflies, freshwater mussels, moths, and cave biota.

While working for the Natural Heritage Program, Joe and I continued to investigate the isolated, and rather weird, population of Chicken Turtles in Virginia Beach. I put radio trackers on the turtles and we learned that they leave the ponds and spend the winter buried in forested sand dunes. That work led me to contact Dr. Whit Gibbons at University of Georgia’s Savannah River Ecology Laboratory (SREL). Joe was always encouraging me

to continue my education and often pressed me about when I might go back for my Ph.D. I greatly enjoyed the Natural Heritage Program and believed strongly in its mission, but was always fascinated by those Chicken Turtles.

Joe started talking with Whit, and in 1992 Whit offered me an assistantship at the University of Georgia and the opportunity to study the Chicken Turtles and wetland conservation on the Savannah River Site. I should note here that Whit is another one of my career mentors and friends, on par with Joe. So, I left Virginia, and moved to near the Georgia/South Carolina border. However, about a year after I had begun my Ph.D. work at Georgia, Joe visited SREL. During a conversation among Whit, Joe, and myself, Whit said to Joe: “the main reason I accepted Kurt was so that you [Joe] would stop calling me and bugging me about him.” Well, apparently, I clearly owed my Ph.D. opportunity to Joe as well, and I hope he knew that I really appreciated it.

I was busy through most of the 1990s at SREL. Joe and I did not get together as often as we used to, although he came to SREL several times and volunteered his expertise training graduate students and technicians on proper preservation techniques for road-killed snakes and other herps. This was greatly appreciated and it was purely voluntary on Joe’s part, but I’m sure that some of our other SREL colleagues reading this here will recall our “herp pickling parties.” However, Joe and I did manage a road trip together in 1993 to attend a turtle meeting held in Purchase, New York. Having grown-up in New Jersey, I wanted to show Joe some ecological highlights of the state. Joe had never been there and joked that, as a Virginia native, he really was not comfortable north of the Mason-Dixon line. We detoured through the Jersey Pine Barrens, stopping to swim/soak in the tannin-



Fig. 15. Joe and Kurt in Florida 2011.

stained Batsto River, and we found some Red-bellied Turtles and looked at Pine Snake habitat—a species that was only legendary in Virginia, as neither of us had ever seen one there.

I should note here that Joe did not know how to swim. So, I spent some time teaching him—having spent my high school summers teaching swimming and lifeguarding. I think my efforts helped him gain confidence in the water—at least he knew that the lifejacket was going to keep him afloat, when he was wearing it.

In 1999, a meeting held at the Atlanta Airport established the Partners in Amphibian and Reptile Conservation (PARC). Joe and I were there. Those who are familiar with the Habitat Management Guidelines (HMG) series also recognize that Joe was pivotal to the brainstorming that went into the creation of those publications. Joe co-authored the Southeast and Northeast HMGs, as we call them, and helped to co-edit the Northwest and Southwest equivalents. Joe considered the PARC HMGs to be one of the most important herpetological conservation contributions of his career, and he said so in his Smithsonian autobiography.

In 2000, I began a position with Conservation International (CI) and my wife, Tracey Tuberville, and I moved back to Virginia. Joe came to our house with a new mailbox and post as a house-warming present. (Although we no longer live in Virginia that mailbox and post are now at our current house in South Carolina). The position with CI required that I understand the politics of international conservation. And while I struggled some, Joe was there to offer support. During a freak opportunity of obtaining 7,000 confiscated Asian turtles for conservation, a now historic assemblage of people volunteered a week of their time over Christmas 2001 to

the New Year in 2002 to process, measure, and provide supportive care to these turtles outside of Miami, Florida. Joe was there to help, after driving down from Virginia. He helped to coordinate the measuring and marking of most of those animals. That event has been widely recognized as a pivotal moment in the formation of the Turtle Survival Alliance (TSA).

Joe and I have both done some herpetological consulting work. He operated Mitchell Ecological Service, LLC and he helped me establish Buhlmann Ecological Research and Consulting, LLC. I had several projects on National Wildlife Refuges which provided opportunities to manage rare turtles and their habitats. I asked Joe to help me with those, and together we traveled back up to New Jersey to the Wallkill Refuge—and brought my old camper from the Cow Knob Salamander days. Joe helped me build silt fences to trap bog turtles and we spent time surveying the herpetofauna there for the Refuge staff. And I finally got to pay Joe for his time. In a surprise twist, I also had the opportunity to work on the Bosque del Apache Refuge in New Mexico. Joe, Whit, Tracey, Justin Congdon, and I met Charlie Painter there, and we finally got to play with New Mexico turtles and all together as a group. It was great fun.

Joe moved to Florida in the early 2000s, and with his new wife, Susan Walls, they set up home near Gainesville. I think Joe struggled some with the relocation to Florida after a lifetime career in Virginia, and getting into herpetological consulting there was a bit hard for him. Joe had a heart attack in late 2009. I went down to Florida from South Carolina to help get him home from the hospital after bypass surgery and, along with Susan, to help make his house easily traversable during his recovery. As one would expect, Joe had amassed a large

library of books and teetering files, along with a knife collection, in his home office. So, it was a hazardous place for a guy shuffling around after heart surgery, but Susan took good care of him and he recovered fully.

Several years later, Joe was enjoying working on the Santa Fe River, near Gainesville, helping colleagues Jerry Johnston and others with turtle surveys. I attended one snorkeling trip in 2017 and was looking forward to another trip when we lost Joe.

I'm actually not sure how to end this tribute. I know I can keep slipping into other adventures, although I've probably over-described enough of them and hinted at others. If it is not clear by now, it should be—Joe was a great friend, an excellent mentor, and selflessly volunteered his time and resources to help young and upcoming herpetologists, and he strove to turn them into conservation biologists.

In working on this tribute, I have been amazed by how many adventures I had with Joe—and I enjoyed every one of them. I appreciate the time he spent with me, and I'm sure there are others who feel the same way. Herpetology and herpetological conservation have lost a real champion with Joe's passing. And I hope that the investments he made in me and others help us to be able to pick up and carry the torch from where he left it...

Submitted with love and respect,

Kurt Buhlmann

Final note: I chose to make this tribute personal, and so I did not detail Joe's professional accomplishments and contributions. However, the following tributes published in the last year have addressed his global contributions to the herpetofaunal and biodiversity conservation communities.

Dodd CK Jr. 2019. Joseph Calvin Mitchell (1948–2019): natural historian, turtle enthusiast, Marine, Virginian. *Herpetological Review* 50(4): 889–893.

Hilton EJ, Bauer AM, Buhlmann KA, Dodd CK Jr. 2020. Joseph C. Mitchell (1948–2019): herpetologist and natural historian of the Old Dominion. *Copeia* 108(1): 188–194.

Mitchell JC. 2019. *Biographical Sketch and Bibliography of Joseph C. Mitchell*. Smithsonian Herpetological Information Service, No. 155. Smithsonian Institution, Washington, DC, USA. 39 p.

Roble SM. 2019. Joseph C. Mitchell (1948–2019). *Banisteria: A Journal Devoted to the Natural History of Virginia* 52: 52–73.



Fig. 16. Joe with a Suwannee Cooter, Ichnetucknee Springs, Florida, 2017. Photo by Jerry Johnston.

Walls SC, Buhlmann KA, Nickerson MA. 2020. Dedication: Joseph C. Mitchell. 16 August 1948–2 July 2019. Pp. vii–xi In: *Snakes of Arizona*. Editors, Holycross AT, Mitchell JC. ECO Publishing, Rodeo, New Mexico, USA. 837 p.

Some sources of Joe's older publications:

- *Virginia Wildlife*. Joe published many popular articles in this magazine, which can be accessed at the **Library of Virginia** website (<https://www.lva.virginia.gov/>).
- *Banisteria*. Joe took great pride in writing and publishing about the natural history of Virginia, and a trove of information about Virginia natural history, much of it written or edited by Joe, can be accessed at: <https://virginiannaturalhistorysociety.com/banisteria/banisteria.htm>.
- *Catesbeiana*. Joe was active in the Virginia Herpetological Society and published in its journal, *Catesbeiana* (<http://virginiaherpetologicalsociety.com/catesbeiana>).