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# BULLETIN OF THE CHICAGO HERPETOLOGICAL SOCIETY Volume 54, Number 12 December 2019 

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Cover: Long-tailed salamander, Eurycea longicauda. Drawing (as Salamandra longicauda) by T. W. Hill from North American Herpetology; or, A Description of the Reptiles Inhabiting the United States. Volume III. by John Edwards Holbrook [First Edition], 1838.

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# The Last Chapter 

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## How does one close the last chapter of an outstanding story?*

Ten days before Christmas 2017, I received a telephone call from a good friend, turtle biologist George Heinrich. I have been associated with George for several years now, as we share the same passion for turtle and tortoise conservation. A couple of years ago, George and his partner in the Florida Turtle Conservation Trust, Tim Walsh, came up with the crazy idea of traveling throughout the entire United States over a one-year period, and viewing in the wild as many of the nation's 59 turtle species as they could. This idea presented one heck of a challenge, but as they shared their ideas with other turtle biologists, conservationists and enthusiasts, it lit a fire that could not be extinguished. The goal was to bring awareness to the plight that chelonians face throughout the country. Their habitats were dwindling and being compromised to the extent that several species were already threatened and or endangered with extinction.

The Big Turtle Year was born. <www.thebigturtleyear.org>
George and Tim began their endeavor on January 1, 2017. They mapped out a strategic plan with several itineraries, meeting up with local turtle experts in numerous locations throughout the country. As they began their mission, "turtle people" from all corners jumped in and volunteered their expertise.
"Sponsors" contributed to help offset the expenses. "Partners" were chosen, with whom George and Tim could meet in each of the targeted study sites. These local experts guided them into


George Heinrich, turtle biologist / conservationist. Photograph by Robert Krause.
carefully selected habitats of the sought after species. As the year unfolded, the Big Turtle Year website documented all of the endeavors and successes inching away at that \#59 goal.

When George called, I thought he was merely going to wish Denise and me a Merry Christmas, but he had something else in mind. The Big Turtle Year was winding down. He already accepted the fact that he and Tim were not going to hit that 59 number. As of that date there were four species left and chances of locating them all were next to impossible. They were at \#55 and there were fewer than three weeks left in the year. Of the four species remaining, two would be totally impossible to locate due to weather. Brumation activity had already begun in many parts of the country. However there were two other species which George felt he had a shot at no matter how high the odds were stacked against him. Those two species were the Hawksbill Turtle and the Chicken Turtle, both of which he already knew would be extremely difficult to locate.
"Bob, I'm planning on traveling to the Keys in a week or so. I have to give it one last try. I've got to find a Hawksbill Turtle. Can you join me?" I just smiled and thought "Yeah right, over Christmas holidays, is he crazy?" Denise and I were in the kitchen finishing our holiday planning as we were about to welcome 22 people for Christmas dinner. She overheard George's request, looked at me and said "Go for it, Bob".

The next thing I knew I was flying to Tampa on the day after Christmas, excited to be with George on his last quest of the Big Turtle Year. We stopped at our favorite Mexican restaurant in Bradenton, on our way to the Keys, to discuss the plan. We were meeting up with another turtle enthusiast, James Barzyk, and his son Harrison. Earlier in the year, James Barzyk, my son James and I had guided George in locating two of his sought-after species, a Blanding's Turtle in Michigan and an Ornate Box Turtle


Robert Krause, George Heinrich and James Barzyk. Photograph by Rob Carmichael.

[^0]in western Illinois.
At 9:00 the next morning, Wednesday, December 27, 2017, the four of us embarked in a rickety little boat searching for the reef at which we were told we would have the best possibility of seeing a hawksbill. As we approached the reef, we tied up to a floating marker. I was still nurturing a sinus infection so I elected to stay on board as the others began snorkeling in the two-foot waves. The water was rough and a bit murky. I took it upon myself to carefully watch them as they snorkeled and dove looking for our treasure. I became worried more than once as I lost track of one or two of the team due to the waves. Harrison had the best luck locating a few turtles but we weren't sure of the species. As time was beginning to run out in that location, at exactly 12:00 noon I heard George yell out "WHA-HOOOOO". I knew what that meant and immediately untied the boat and drove over to pick up "one happy camper." He described the moment to the "T." It was like a surreal experience where, as George described, his mind was beginning to wander. He was canvassing an area of the reef being mesmerized by the moment. Thinking of that day, and what it meant to him personally. Then all of a sudden, it appeared - the most marvelous site only a few feet away. The markings on the carapace, face and front flippers were so clear and beautiful. There were two metal clips on the shoulders of the carapace which indicated that this specimen was involved in another study. George didn't want to disturb the turtle and instead just elected to follow it briefly as it slowly submerged out of sight. He thought he was dreaming.

As George entered the boat, I snapped a picture of that "shiteating grin" he always displays when he is happy. When he settled down a bit on the boat as the rest of the team was climbing on board, George looked at me, smiled and said "I like turtles."

You would think that we all would savor the moment but not us. Almost simultaneously, we said: "We're out of here. Let's go find \#57, that Chicken Turtle." As we headed back to shore we telephoned Tim Walsh to advise we had just found \#56. You would have thought he would have congratulated us. But no, not Tim, he just said "now go find \#57. He knew us well.

We parted ways with James and Harrison, and Thursday morning, December 28, 2017, found George and me excited but trying to face the day pragmatically as we headed through the Everglades on our way to Big Cypress. George had been shut out several times throughout the year attempting to find a Chicken Turtle. He sought help from several local turtle conservationists some of whom were well known and worked with Chicken Turtles extensively. The only feedback he received was disheartening to say the least. As the day moved on, we both knew without saying it that this was our last day. We stopped at a few local nature tour companies asking the locals if they knew of any Chicken Turtle sightings. No one could help.

After traveling throughout the day, searching several, what appeared to be ideal, habitats, the only encounters were many small- and medium-sized alligators. As the morning turned into afternoon, we stopped for a quick lunch and then headed towards Fakahatchee Strand State Park. This was our last attempt. It really didn't dawn on me until George pointed out the fact that


Chicken Turtle (not very clear due to excited, shaky photographer). Photograph by George Heinrich.
not only have we not found our Chicken Turtle but we haven't seen one single turtle of any species all day. This, in spite of the fact that we were finding many ideal basking sites. We agreed that we were elated to find \#56, the Hawksbill, and that we knew it was next to impossible to find the Chicken Turtle. I could see that we were already giving up.

As the day started coming to a close, without a spoken word, we continued cruising slowly down this long, secluded, winding dirt road. Each side had, what appeared to be ideal habitat with shallow, clear, slowly moving water with plenty of aquatic vegetation, branches and floating logs. We could see the sun setting in the west and most of the ideal basking spots we were finding no longer were being hit by the direct sunlight which attracts our hard-shelled treasures. We were approaching the end of the road where we would have to turn around and return empty handed. It was 4:00 in the afternoon and we just went over a culvert which took water from one side of the road to the other. It was such a picturesque sight.

All of a sudden, George screamed "turtle." I turned my head and there it was - basking on a log which still had a bit of sunlight hitting it. Shaking and squirming, George took out his binoculars to verify his suspicion and then screamed again "Chicken Turtle." He dropped his binoculars and then hugged and kissed me on my left cheek. I swore to myself I would never tell anyone that he did that, but oh well, why not, I was just as excited.

It turned out that the Chicken Turtle was just as happy. He posed long enough for us to snap off a few photos and slowly slid into the water when George pushed his luck by crawling a bit closer.

George told me later that he wasn't sure if it was a Chicken Turtle or not so he left out the word "chicken" when he first screamed. This was in order to, I'm sure, save face, as all of us turtle nerds do.

The last and final species for the Big Turtle Year 2017 was found.

Number 57 was appropriately named HEINZ, the Chicken Turtle.

This ultimately became the perfect close of the last chapter: "I LOVE TURTLES TOO!"

## Snakes on a Plane-For Real

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In last month's column, I reviewed the movie Snakes on a Plane. That piece started as a lead-in to this column, but eventually became a column in and of itself. If any of you read it, great! If you didn't, it's not too late. But I must warn you that when you read anything that this author writes, the brain that you warp may be your own.

Long before the movie Snakes on a Plane made its debut, there were many other snakes on a plane stories circulating among those of herpetological bent. These stories were universally shared while sitting around a campfire, and were often inspired by inner baptisms of beer, which is the ultimate truth serum (or big fat lie serum) for aging herpers. Any time the subject of snakes on a plane comes up around one of these fireside chats, any herper who ever flew on a commercial jetliner (before certain lowlife started crash-landing them into buildings) will always smile in wry fashion. It is a smile of wisdom, a smile of fond memories of a different time and a happier place. Yes, there was a certain time in commercial aviation history where many a snake received a free, one-way plane ride. That ride was not exactly in first class. These passengers were either stuffed around favored body parts inside one's underwear, or packed into carry-on items, or suitcases that wound up in the cargo hold of the plane. Nearly every herper over the age of 60 has either transported snakes in this fashion, or knows somebody else who has. Be advised that those days are over.

We must now explain something to any youngsters who may read this column. It is at this point that the author has to pause and admonish his reader that to try anything like what is about to be related will get you in deep trouble. YOU WILL GO TO JAIL! So, if any of our little herp angels are reading this stuff, note the "go to jail" part. As for you adults, a simple "no waydon't do it - it ain't right" should work. Heck, if something like what is about to be said happened now, they'd not only cuff and stuff the perpetrators, but quarantine the plane as well!

Having said all that, I'm trying to mentally gather all the details of this particular snakes on a plane campfire story. While I can't verify the story to be $100 \%$ true or accurately relayed, I can certainly say that I know the three characters involved well enough to know the whole story is certainly possible. Knowing them as well as I do, I believe this story is probably pretty tame compared to reality where these three scoundrels are concerned. One of the three characters was a herper who had recently moved to Florida. The other two were his herp-buddies who flew to Florida to visit him. Strangely enough, those two had carried some empty suitcases with them. It could be said that they were traveling light, but bulky. On their return flight, those suitcases were full. The year this happened was 1978, and the most interesting part of this story is that they all got caught! Busted! Red-handed! THEY SHOULD HAVE GONE TO JAIL! Miraculously, they didn't. But we are getting ahead of ourselves by sharing this.

We start by introducing the cast of the three main characters in this story. If their accomplishments and approach to life were to be averaged against any standard of human achievement, the word "mediocre" would best apply. This ranking assumes that there are various levels of the meaning of the word "mediocre." Whatever level falls below the all-encompassing word is hard to define. Perhaps "total disaster" might fit the bill. Many other terms, such as "losers," "no hope" or "prison bait" come to mind. While this author struggles with whatever terms best describe "below mediocre," there is a more definitive term for what is beyond the upper limits of mediocrity. That term would be "below average." In order for the reader to better understand the author's ranking system, one of the three characters in this column might reach the lofty rank of below average. (Make that the bottom part of below average). The other two characters teeter on that very fine line between the bottom of mediocrity, and whatever total hopelessness lies beneath it. Hence, when the positive and negative virtues of each are added up and divided by three, a solid ranking of mediocrity might be achieved. By saying this, we do not necessarily assassinate the characters of the characters. We compliment them.

With so much at risk in the telling of this tale, the author thinks it best to go with pseudonyms in naming these three winners. While "Moe, Larry and Curly" come to mind, we have no wish to besmirch their good names. We shall instead call them "Lucky, Blade and Mooch." There are certain elements of truth that served to select the moniker of each, for each. Lucky was so-named not only because of his good personal good fortune in the story about to unfold, but also, throughout life in general. On numerous occasions, Lucky's exasperated father would tell him: "Son, you could fall in shit and come out smelling like a rose." Blade was so-named because of a favored debtcollecting method that he utilized. Blade never held a regular job in his life, but he was gifted with a green thumb. Indeed, every spring, as soon as the snow melted, Blade would demonstrate a burst of ambition by utilizing his highly-honed horticultural skills to plant a favored cash crop. He would do nothing until October rolled around, when, with another flurry of activity, he would harvest his crop. As his crop was a cash crop, his customers all paid cash in order to reap the rewards of his skills. At times, he would grant lines of credit to his customers. On those occasions when his customers did not make their payments, a knife held to their throat would inspire them to remember where their checkbook was stashed. It was a primitive but effective way to do business. Unlike Blade, Mooch did work more or less at steady jobs. But Mooch was highly selective about how he was paid. Mooch utilized the CUT (Cash Under Table) method of payment for his services. By utilizing CUT in artful fashion, Mooch was able to avoid any and all pecuniary commitments to his rich Uncle Sam. In other words, he "cut" the necessity of having the IRS in his life. Being the selfless sort of person that he was, Mooch felt like he was doing the IRS a favor
by not burdening them with the trivialities of his lifestyle. Our three characters, Lucky, Blade, and Mooch, were each as different in their personalities as their approach to life. However, they had two things in common. All three were in their mid-to-late 20s, and all three passionately loved all things herpetological in nature. As all three were from the same small town, it was only natural that they would know each other well. Their age, common interest, and going through life in the same small town assured that they would be the three peas in a pod that they were. It was Lucky who first cut the bond between them by relocating to Florida. He was actually trying to hide from them-especially Mooch. (Mooch had a way of paying visits to people that might last decades. He is aptly nicknamed for this column.)

In May of 1978, Blade and Mooch learned of Lucky's hideout in Orlando, and flew down to pay him a visit. In no time flat, Lucky's massive Plymouth Fury was roaring southward, leaving a trail of empty beer bottles and cigarette butts in its wake. The three were heading in the general direction of the Everglades, but many side roads and taverns thwarted any form of linear motion. And any box turtle, young alligator, or snake witless enough to be in their path was abruptly snagged. The empty suitcases soon began to fill. While the list of collectibles was noteworthy, the only herp worth the mention was a massive Cottonmouth. While the length of the beast was only about four feet, the girth was enormous! There is no exaggeration when we say it was nearing four inches in diameter, with a head as large as a man's fist. It was as evil and as ugly as a snake can get hence, the trio loved it!

All things must pass, as did the fun of the southern Florida adventure. While enroute from the Everglades back to Orlando, the trio made a stop at a backwoods bar somewhere in the middle of nowhere. It was Saturday night, and all manner of rednecks and ne'er-do-wells had gathered for the occasion. So bad were the cast of characters within that the trio-unkempt, raggedy, and stinking to high heaven from three days of snorting Nodoz and obtaining but brief snatches of sleep-fit right in. Drink after drink flowed, and one of the patrons dropped some quarters into the jukebox. The song "It's a Heartache" by Bonnie Tyler began roaring out of it. The shitkicker tune, resplendent with twanging guitars and the winy, plaintive "somebody-done-me-wrong" lyrics, lent to the raunchy ambiance of the scene. As soon as the first lyrics began to permeate the ears of the patrons, a lonely little swamp thing began to entertain notions of romance. She was sitting two tables away from the trio. While staring straight at Lucky, she shouted above the din of the music, "Who wants to dance?" She was easily forty years the senior of Lucky, and wore an eye patch. Her good eye was plastered with running mascara, and her facial hair was in need of a shave. In fact, everything needed a shave. There was hair hanging out of every opening in her attire, which included ridiculously short hot pants, and a ratty tank top. With her one good eye affixed upon him with the dance offer, poor Lucky began to slide under the table. First off, he greatly feared this swamp thing, and secondly, he couldn't dance to save his soul. But there was no place for Lucky to hide. Swamp thing rose from her table, began swaying her hips in suggestive fashion, and started to advance toward him. Her moves suggested that she could really cut the rug, but all that Lucky wanted was for her to cut her hair. He was trapped
like a filthy rat, and it appeared that he would soon be in the embrace of this Cyclops-like creature. And then, just when all seemed hopeless, a rather large and even hairier body rose from Lucky's table - completely blocking his view of the shaggy advance of swamp thing.
"YO-ME HONEY! I WANT TO DANCE!" It was Mooch, who saved the day for Lucky by suddenly intercepting her advance. Blade and Lucky exchanged wide-eyed glances across the table while they observed swamp thing and Mooch start tripping the light fantastic, dipping and swooping with a competency that they never could have guessed possible. The couple continued to grace the dance floor through the next tune, "Polk Salad Annie," by Tony Joe White. For this lively number, no doubt inspired by the suggestion of alligators and an earthy woman, Mooch twirled his lady like a top, slid her under his legs, snapped her back up, and promenaded and pranced about every corner of the bar. The next song, "Muskrat Love," by Captain and Tennille, seemed entirely appropriate for the occasion. The couple embraced tightly, held together perhaps by hair and slime, gazed into each other's eye (Mooch closed one of his), and it appeared that swamp thing and Mooch were going to be altar-bound by the end of that number.

However, as they whirled and twirled and tangoed, singing and jingling their jangle, floating like the heavens above-and all the other mealy-mouthed top 40 tripe - Mooch's two companions suddenly noted that the other occupants of the bar were less than entranced by the performance. Some were rising from the tables, others began to clean their fingernails with switchblades. The burly bartender pulled a baseball bat out from under the bar, and began slapping it into the palm of his open left, ham-like hand. All were eyeing Mooch with very bad intent. Swamp thing might not have been much, but she was all that these boys had for entertainment that evening. And they were not at all willing to give her up to any one of these damn Yankees without a fight. It was time to be LEAVING!

Lucky handed Blade the keys to his Fury, and told him "Get him the hell out of here - and get that car rolling!" Blade was on it, and much faster than it takes to tell the story, he horse-collared Mooch. With a powerful yank, he separated the pair. There was a ripping sound, much like the tearing sound of a rapidly opened strip of Velcro. This no doubt was caused by the sound of their entangled body hair being rent out of its roots. There was also a sickening and audible "schhhmuking" sound, as the seal of melding body slime was broken. Over the loud protestations of both of the dancing fools, Blade forcibly thrust Mooch out of the door and into the night air. Meanwhile, Lucky hurriedly left an excessive amount of money on their table, and began smiling, bobbing, and the issuing apologies of farewell to the angry throng of patrons. He paused at the door of the establishment for long enough to see Blade pack the still pretesting Mooch into the vehicle, get in the driver's seat, and begin the slow roll out of the parking lot. By this time, the entire bar was converging on Lucky, no doubt ready to beat him until he begged for death. But one of Lucky's best survival skills was the blinding speed at which he could run. Screaming all the way out the door, he sprinted toward the retreating vehicle. Upon noting the rear windows were open, he did not bother with the door handle. He
dove head-first through the opening on the driver's side. Such was his speed that the momentum nearly carried him all the way out the opposite window. He stopped that momentum by grabbing the door frame. The tires spun gravel, caught hold of asphalt, and that mighty Plymouth Fury jetted out of the sight and lives of any would-be assailants.

There were now three problems with the escape. The first was that Lucky's lanky legs were still hanging out of the driver's side rear window. The second was that he was locked into a push up position over the back seat, due to the presence of a third problem. Lucky had first noticed this third problem while he was airborne in his cross-Plymouth journey. Said third problem was that the huge Cottonmouth described previously was coiled snugly on the back seat. It had somehow managed to escape containment during the bar stop. Lucky's crotch was now hanging inches above that coiled form. This inspired him to loudly proclaim the situation, but his cries for help could not be heard over the din of Mooch's pleas to be returned to his lost love. Eventually, many long miles later, over the bull-like and testosterone-laden shouts of an extremely irate and lovesick herper, Lucky's appeals for help were heeded. Blade pulled the car over, and the snake was safely snatched out from under Lucky's favored body parts. Why that snake didn't see fit to bite the poor dude is unclear. Perhaps little side incidents like this help to explain why his pseudonym was chosen?

But all of this was nothing compared to the next day. Said next day was the day that Blade and Mooch were to fly home from the Orlando International Incident. Er uh, make that the "Orlando International Airport." (But "international incident" is closer to correct.) On this day, our three heroes arrived at the airport, lugging their suitcases and a gym bag. (The latter being a loan from Lucky. It was of course never returned.) As is the wont of losers worldwide, they barely arrived in time to make their flight. Blade was the first to go through the security gate. The first two bags on the conveyor contained only clothing and such, and these two bags sailed on through without complications. Not one to stick around for trouble, Blade grabbed these two bags, and disappeared down the gate aisle as he headed for boarding. Lucky was the next through the security gate, and he had a ringside place for viewing the innards of the third piece of luggage via the airport X-ray. Said third piece of luggage was his gym bag. Inside that were six box turtles. These turtles were not placed into anything else, nor hidden in any way, shape or form. Nope, they were just clambering about, climbing over each other, and exploring the inner perimeter of the gym bag. As Lucky looked at the X-ray monitor, he beheld, in perfect black-and-white clarity, well . . . six box turtles that were clambering about, climbing over each other, and exploring the inner perimeter of the gym bag. It was at this point where the woman who oversaw the same X-ray as Lucky was viewing must have somehow pushed the hidden button. Some security personnel began to drift over to survey the scene. There was no need to open the gym bag (they had already seen what was inside), so they waited for the fourth suitcase to go under the X-ray. Once again, Lucky had a good look at what security was seeing. They were not seeing much. As everything in this suitcase was placed in snake bags, the black-and-white image of the contents revealed only a murky white haze. Lucky was standing on the opposite side of
the conveyor from the airport security folk. The semicircle of this select group of admirers was growing larger by the second. With a sweet smile on her face directed at Lucky, a slender, elderly member of the security force unsnapped the hasps of the suitcase. The top of said suitcase immediately popped open a distance of about six inches. (Blade and Mooch had packed it tight!) The kindly woman then flipped the top all the way open. It flipped 180 degrees open, and everybody on either side of the conveyor could now see the contents. (Some of the security force present was now beginning to join Lucky on his side of the action. Lucky knew these people were security by noting their spiffy uniforms and Andy Frain-like usher hats). As soon as the view of the suitcase innards was apparent to Lucky, he noted, with no small measure of silent alarm, that his two genius buddies had put the bag containing the Cottonmouth on top. When that poor woman began to gently start probing that sack of pure, unadulterated danger with her bare hands, Lucky could remain silent no longer. In a voice as loud as a foghorn, a shout that boomed so loudly that nearly it knocked that poor woman backward, Lucky hollered "STOP!"

And stop is exactly what we will do here for a moment. As previously mentioned, Blade is now out of sight, and out of the story for a few paragraphs. Lucky has just made a spectacle of himself by shouting at the top of his lungs at a member of airport security. While that shout probably saved a person's life, nobody knew that yet. And while Lucky is drawing multiple stink-eyes from an entire Andy Frain-like security force, Mooch is bringing up the rear. He will soon become the center of attention, but at this point in time he can't seem to get through the security gate. Every time he steps though it, it goes "Beep." So, he reverses, and goes back through it again. "Beep" again. Before proceeding any further with the "why" of all that was about to follow with the hapless Mooch, we must first explain a few things. Mooch was not a happy camper. He had been abruptly separated from his precious swamp thing the night before. He had been manhandled, and forced to flee a scene he had no desire to leave. No amount of reason from his two companions could penetrate the nine feet of lead that surrounded his cranium. He had bitched about it all the way from the Everglades to Orlando. Countless times that evening as they fled northward into the night, he demanded that they return to swamp thing. Muskrat love awaited him, and that was something he coveted. They had robbed him of the experience. He was still angry with his companions about this. Not only had Mooch been on their case about this all the way home, but he awoke the next morning in a vile and surly mood. All the way to the airport, he continued to relentlessly and irrationally carry on about how wronged he had been. It did not matter to him that those rednecks would have skinned him - and the other two - alive if they had returned. And now he was trying to get through this effing security gate, that would in turn beep its displeasure at him each time that he did. The irritating noise added further fuel to a primitive brain that was already white hot. "Beep" said the security gate again. And again. And again. And as mad as he was, each time the annoying beep occurred, he dutifully reversed through it, and tried to go through again. An organic time bomb was ticking, the fuse was very short, and in a few seconds, it would become a matter of "thar she blows!"
"I'm sorry for shouting at you ma'am," (Beep) Lucky said in soothing tones, "but the bag you were just fingering has a venomous snake inside." (Beep). "Had I let you continue, it would have bitten you." (Beep).

When that statement sunk in (Beep), her eyes opened wide, but she had a job to do. "I'm sorry sir, but I must do my job here." (Beep). "I hope you understand, but I must search your luggage." (Beep-mumble mumble-Beep).
"It's not $m y$ luggage. But that's okay, ma'am. May I please remove the sack that holds the dangerous snake? That is the only thing that can seriously harm you." At this request, she wasn't the only person nodding approval. Six heads were bobbing up and down, and six sets of eyes were suddenly wide-open and alert. Lucky cautiously fiddled about inside the suitcase, and found the short, knotted end of the bag. As he hauled the bag out of the suitcase, the Cottonmouth began to thrash about wildly inside. The heft inside the dangling sack began to writhe and dance as if it were demon-possessed, and there was no longer any doubt that Lucky spoke the truth. (Beep). Everybody drew back to a respectable distance. There was nobody standing any closer than 20 feet of that piece of luggage. He then said to the woman: "Now it is reasonably safe for you to proceed."
"Will you please open one of these other sacks for us?" She asked.
"Sure! Which would you like to see? (Beep)
"That one," she pointed inside. Lucky was having trouble ascertaining which bag she was pointing to, as she was now standing with her back to the wall, about thirty feet away. (Beep) "This one?" "Yes, that one. Please." "Happy do so, ma'am." Lucky set the dancing bag full of Cottonmouth to one side on the floor, and untied the indicated bag. That being done, he left it still inside the suitcase. One of the five baby alligators that was inside suddenly thrust its head out of the opening. As soon as its head emerged, it gaped in what it hoped was a menacing manner. To Lucky, it was a cute and harmless display. But the gape worked its magic with the Andy Frain gang. (Beep).
"E-e-e-e-e-e-e-e-e-e-e-k!" Screamed the woman, who completely lost her cool. "It's a snake!" (Beep). But she was not the only one who lost her cool, for a voice suddenly boomed from behind Lucky:
"NO YOU STUPID WENCH!" (He actually used the Bword) "THAT'S NOT A SNAKE. IT'S AN ALLIGATOR!" It was Mooch, who was now approaching the conveyor. It was Mooch, who really had no business being inside the secured area. The relentless beeping should have kept him where he belonged. It was a Mooch like Lucky had never seen before. It was a stark, raving mad Mooch, a "you won't like me when I'm angry" kind of Mooch. His skin didn't turn green, but his stout body seemed to be stretching the fabric of his clothes. His eyes were wide-open, revealing a double-barreled swath of bulging red veins. The downturned mouth revealed a sinister scowl of wrath that was apparent even through his full beard. He stormed to Lucky's side, and snatched that alligator from the open sack. Immersed in his all out irrational rage, he seemed to think it important to give that poor woman - and the rest of the
terminal-a lesson in proper herpetological identification. He thrust that little alligator in the direction of the woman, and said "See! It has arms and legs - it is not a snake!"
"Whoa, Mooch? What are you doing? Calm down, buddymaintain - okay? Here," Lucky quietly hissed at his enraged comrade. He pulled the sack full of baby 'gators from the suitcase, and opened it wide. "I've got an idea. Put the 'gator back now. I'll go to the gate with you, and we'll get this mess cleared up." Mooch suddenly thought better of the situation he had just created.
"I'm sorry, Lucky," he pleaded as he automatically dropped the 'gator into the sack. "It's just that this stupid wench (insert b-word again) doesn't know the difference between a snake and an alligator. And why the hell is everybody staring at us?" "Uh, maybe because you are creating a spectacle out of yourself?" Lucky suggested as he knotted the bag and laid it back inside the suitcase. "Look, let's just go back to the gate. If you're going to catch a plane, we need to get you through that before we can do anything else."
"The damn thing keeps beeping at me. I'm tired of it. This is really stupid."
"It sure $i s$ " Lucky wholeheartedly agreed, but was quick to add "but it ain't nothin' but a thing. C'mon, let's get you through this gate." Incredibly, Mooch placidly accompanied Lucky the 50 or so feet back to the security gate. A gang of six or so Andy Frain folk followed, but kept a very safe distance. They were all intimidated by this hulk of a herper. (These days, he would have simply been tasered many times over by TSA). All eyes were on Mooch as he walked through the gate in reverse. He stepped back through in Lucky's direction. "Beep" said the gate. Once again, the irate herper began to increase in size, and his otherwise baggy clothes became skin tight.
"Try emptying your pockets," Lucky helpfully suggested.
"I already have!" Mooch remonstrated. "Look!" He pointed to a bowl that had been placed on a table near the unsecured side of the gate. It was the same kind of arrangement then as it is now. Said bowl was full of normal pocket items. But Mooch suddenly had an epiphany, for there was one last item in his pocket. He fished a small plastic bag out from one of his pockets. Said bag contained some of Blade's finest homegrown product. There was an amount roughly the size of a man's thumb, perhaps four grams worth. It was all neatly wrapped with a rubber band. What had been setting off the metal detector? The world will never know. With a move that was about as subtle as a train wreck, in front of God and everybody, he said "Here!" And then he stuffed that little package into Lucky's right front pants pocket. The gate problem was no longer an issue. A whole new issue was suddenly brought to the forefront when one of the Andy Frains asked: "What did he just put in your pocket?"

Thinking quickly, Lucky thrust his hand into his pocket, and somehow managed to end around what was sure to be the offending item by deft usage of fingers and thumb. He offered up his automobile keys.
"Oh!" Lucky explained, "he was just giving me back my keys."

About this point in time, a new face appeared in the security force. This person was not one of those Keystone Cop, Andy-Frain-usher-type of airport security force. While she stood all of five foot nothing, she was dressed in something that looked far more official than her counterparts. A pistol and billyclub hung at her side, but that was hardly noticeable beyond the shiny badge that was proudly affixed to her chest. That badge said "Police" all over it. She was attractive, yet lean and mean-looking, and definitely oozed an air of authority.
"That's not what he put in your pocket," she flatly stated to Lucky, her voice ice cold, "you seem like a sensible guy. So why don't you show me what he just put in your pocket?" Before Lucky could think of anything else to do, Mooch bulldozed his way into the scene again. He boldly thrust his hand in Lucky's pocket, and retrieved the little packet. He held it openly for all to see, handed that packet to the woman cop, and abruptly responded: "Jeez lady - it's just a little bag of pot. What are you going to do about it - take away my birthday?" Without giving her a chance to respond, Mooch suddenly began to grow very large again. Even bigger than with the case of the misidentified alligator grew he. He was getting angry againand nobody was going to like him after that.
"Lady, do you know what happened the last time somebody tried to arrest me?" he inquired of the policewoman. Before he answered his own question, he took a few steps close to her in an obvious attempt to intimidate her. "I beat the shit out of the seven MPs who tried it, and just walked away!" Indeed, Mooch looked like he was not lying. And he looked like he was ready to try to repeat his performance. But this young woman cop was bad news. She not only stood her ground, she stepped in closer to him! She looked directly upward into his eyes when she got within slapping distance of him. Old Mooch may have clobbered seven MPs while on a drunken shore leave, but this woman looked far more dangerous than any of those military cops could ever have been. She was about to say something more, when suddenly, Blade innocently burst upon the scene. He could not have arrived at a better time, as things were about to get very ugly. As Blade unwittingly entered the very tense situation, he still had his two suitcases in hand. He loudly announced: "Whelp boys, it appears that we aren't going anywhere! I just waved bye bye to our plane!" He said this with a big grin, that barely disguised his disappointment. And then, he must have sensed the danger in the air, for he said: "Uh-oops? What's going on?"

The impeccable timing of Blade's arrival likely changed the course of what was about to happen next. At this point, the cop and Mooch were standing inches apart. Lucky was poised nearby, ready to step in and intervene. He was probably about to get whopped upside the head in the process. Time stood still for a split second. And then, incredibly, the cop handed the little baggie back to Lucky. She turned her head ever so slightly to speak to him, while keeping her eyes directly on Mooch. In a low and mean voice, she said to him. "Here-take this. Now, I want you to take him," (She stabbed Mooch in the chest with her index finger) "and your other little pets too, and get out of here!"
"Yes ma’am!" Lucky responded. "We are leaving right
now!" Even Mooch seemed to understand that a hasty departure was the wisest course of action. Lickety-split, everything was quickly packed up, and out the door they went so fast that it never had the chance to hit them in the ass. They got away clean--with everything that they had brought with them. This despite the fact that so many laws had been broken that the list of such violations, both wildlife and civil, would exceed the length of this column.

It is asking a lot to expect the reader to believe this accounting. But wait-there's more! Yes, believe it or not, there's even more incredible stuff that happened with these three very determined nitwits and their plot against all that is righteous and pure in this world. No lies are told in the title. For as the title dictates, there were snakes on a plane for real! (We just haven't gotten you there yet.)

The ride home from the airport that day involved a rather long-winded soliloquy, delivered from Lucky to his extremely thick-headed and dullard companions. Each sentence contained colorful language directed at his former buddies. Words like "idiots," morons," "stupid," and "dumbasses," as well as other words too brutal to mention here, flowed from his maw. More than once, Lucky offered to stop at a nearby state park to dump all of their contraband. While this act would be cruel, immoral, reprehensible - or any number of other similar descriptions there was a certain point of no return that all the preceding despicable and dirty deeds had breached. After nearly every rule in the books had been broken, what were a few more?

But, no! Getting through the thick skulls of his two friends was like drilling through bricks. Blade felt that there was still a way to get both them - and their new pets - home. When the new plan was explained to them, Lucky just shook his head and said "Fine!" (Which indicated that it wasn't fine, but such subtleties are often lost on devious and purposeful minds.) The new plan was going to be that Mooch and Blade would check their pets into baggage claim. Lucky agreed to drop them off at the airport, but that was going to be the last they would see of him. Ever! While both took offense to that notion, they accepted it. Blade made the arrangements to fly out the next day. When that next day arrived, Lucky dropped them both off at the terminal door, bags and all, and promptly deserted them.

As soon as Lucky left them, he began to feel guilty. He always had, and continues to have, a strong sense of responsibility to anybody, right, wrong or otherwise, who is under his watchful eye. Besides that, it could be great fun to see what was going to happen next, Instead of leaving them cold, he circled into a nearby parking lot and cautiously entered the terminal. He purchased a newspaper on his way in. Upon spying his two friends in the baggage check line, he grabbed a chair at what was deemed to be a safe distance. He hid behind that newspaper, and viewed the proceedings by lowering and raising it. James Bond would have been proud of him. He saw the pair approach the woman behind the counter. There was some back and forth between them and the woman. The line behind them began to lengthen - this all seemed to be taking a very long time. Eventually, the Andy Frain airport security began to gather around them. And finally, the pair picked up their bags, and stormed away. They stepped outside through the same door they'd en-
tered when Lucky had dropped them off. Lucky gave it all a few minutes, and upon noticing that they weren't being followed, folded up his newspaper and followed them himself. He caught them just as they were heading for a pay phone. They were about to try to calling him!

Blade's plan went wrong when the two geniuses decided they wanted to insure the contents of their luggage. They chose an exorbitant dollar amount, for to them, the contents of their suitcases were priceless. (Much more than a few alligators, a nasty Cottonmouth, several box turtles, and various forms of ratsnakes and watersnakes are worth). The insurance angle, and subsequent dollar amount, suddenly required the dynamic duo to claim what was inside. When they began to hem and haw over that requirement, the agent behind the counter grew suspicious, and called in security. The security group was, of course, mostly the same as those who had seen Mooch's performance the day before. Fortunately, the policewoman was not one of these. Upon seeing that the jig was up, the pair left the scene.

Because he wanted those two misfits out of his life as quickly as possible, Lucky offered to handle the suitcase situation. He took Blade's plane ticket from him, and let the dust settle a bit before entering the premises. He took his place in line. When it was his turn to step up to the counter, he was greatly relieved to note that the person behind the counter was not the same person who had been involved with the other two misfits. He placed the suitcases on that lower-berthed counter where any plane-bound suitcase should go. He then handed the woman "his" plane ticket. The proper arrival tags were looped around the handles of the suitcases, and down the conveyor and out of sight they went. The woman smiled warmly at Lucky, and said "Have a nice flight, Mr. Blade."

One might think that any number of complications might have thwarted this operation once that luggage hit the conveyor belt to the plane. The perfect sting situation had just presented itself for any wildlife officials. But there were no complications. The plane took off and landed, as planes do thousands of times every day. The luggage made it from the hold of the plane to baggage claim, where it was retrieved-without incident-by the owners. If there can be any happy ending to this story, it can only be that the herps made it home safely. Whatever happened to those herps from there to whatever their final destination became probably did not have a happy ending. We can only speculate. Blade and Mooch passed out of Lucky's life shortly thereafter. While Lucky did not follow his edict of never seeing them again, the gatherings of the trio did diminish. It has been nearly forty years since they have seen each other.

The reader might question how the author knows so much
about this whole incident. If questioned, he will shrug, and suggest that he knows Lucky as well as he knows himself. It was Lucky who told his original "snakes on a plane" story around the campfire. Given the details of this event, the readers might be surprised to know that a few scant years later, Lucky passed a full security clearance. He went through that ordeal in order to land a job building atomic bombs. Had that airport incident escalated further, as it should have, any hope of Lucky landing that job would have ended. Sometimes, entire lives can be impacted by one stupid act, and which way those in authority react. Lucky knows how lucky he was, and also knows how much he owes to that tough little policewoman. It might also come as a surprise to know Lucky's stance on such things as collecting wild herps for any purpose is one of strong opposition. In his estimation, taking any wild animal and confining it to life imprisonment simply can't be justified. He has found other ways to enjoy the ever-shrinking glimpses of the wild herps that he does see. And trying to take herps on a plane? In two words: "No way!" That is the case not only because that sort of thing has zero chance of success in this day and age, but also, in Lucky's estimation, it just ain't right! This article was written only to entertain, and share a tale with those of us who do remember the days of snakes on a plane.

But consider yourself warned. Should you ever be inclined to share your own story of snakes on a plane in the presence of this author, make it good one! For when it comes to sharing such stories around the campfire-or on a bar stool - be very aware that in such situations as this, the first liar never stands a chance!

There is a bright spot that should be relayed in closing the books on this event. Prior to moving to Florida, Lucky had sold Mooch one of his vehicles. Not quite one year after the mess just described, Lucky and his visiting brother were heading for Key West. They were going to do some deep sea fishing. A side trip led them into a town along the main drag. And what should they behold in this town? Mooches vehicle! It was parked in front of a ramshackle house. As Lucky and his brother both knew Mooch, they paid this house an unannounced visit. They knocked on the door, and who should answer? Swamp thing! Mooch had moved to Florida, and was living with her! Much has been written about love through the eons. There are so many commonly-used phrases about love that it is hard to select just one to describe this particular situation. We shall instead use two: "Love is blind," and "Love always finds a way." One more just came to mind: "There truly is somebody for everybody."

This here is Roger Repp, signing off from Southern Arizona, where the turtles are strong, the snakes are handsome, and the lizards are way above average.

# What You Missed at the November Meeting: Mike Dloogatch <br> John Archer j-archer@sbcglobal.net 

Your society has no trouble spending money on transporting speakers to our meetings. We search far and wide for interesting people and topics and do everything within our power to convince them to come to Chicago. It's worth it, because we consistently have excellent presentations. But your society also has people within it who are good presenters. When conditions are right, we don't have to fly someone in. We can ask them to bring their laptop from home and drive to the meeting they would normally attend anyway. So it was in October, when we asked Mike Dloogatch to talk about his trip to Africa in 2003.

Travelogues are some of my favorite talks. I take vicarious pleasure when someone talks about the highlights and trials of their excursions. We have had some truly great travelogues. Mike's was no exception. As in everything he does, he diligently constructed and researched an excellent presentation that had me wishing I had been along.

Mike Dloogatch has been a member of the CHS since very early in its formation. He's served in many capacities over the years, held a position on the board for most of that time, and is probably best known as the editor of this Bulletin. With his knowledge and experience he's a major influence on the way your society progresses, and those who've been members for some time understand his importance. Through his excellent editing of the Bulletin, Mike is surely responsible for most of the non-local members and probably for the good reputation of the CHS. With his talk he can now also lay claim to being one of our more popular speakers.

Mike traveled to Johannesburg with former CHS president Lori King and Karl Switek and met Karl's friend Rod Patterson and his son-in-law Frank in South Africa. Mike showed us maps that gave us a nice overview of South Africa and the route taken


Lori King communing with a leopard tortoise found crossing the road.


Mike Dloogatch. Photograph by Steve Barten.
to their primary destination, Kgalagadi Transfrontier Park, covering much of the sliver of South Africa between Namibia and Botswana. Along the way they detoured through Uppington to Augrabies Falls on the Orange River. We saw photos of Broadley's flat lizard (Platysaurus broadleyi) staked out on the rock faces surrounding the falls. Mike said they primarily consume the black flies that swarm around the river and it seems everyone is trying to get rid of the black flies without thinking of the consequences for the lizards. Male breeding colors in this lizard are spectacular. They also spied a leopard tortoise (Stigmochelys pardalis) crossing the road, and we saw the photos. A picture of a rock hyrax gave Mike an opportunity to quiz us on the sister family to the hyraxes, namely the manatees.

A mileage sign posted near the entrance to the park showed the distance they had traveled from Uppington ( 255 km ) and the large distances still to go to their first camp ( 162 km ), most of it over unpaved roads. The camps were cabins, all of which looked pretty nice and all of which were surrounded by fences. Night driving is forbidden in the park, probably because, as Mike said, "Lions you see everywhere." African wildcats are not commonly seen, but we saw a photo of one that the group was lucky enough to spot. Cool little cat.

Photos of wildebeest and gemsbok, bateleur eagles and spotted hyenas were interspersed with photos of cape cobras (Naja nivea) and agama lizards (Agama aculeata). Mike had all of his slides captioned, saying that he hoped it would allow him to talk less, but he engaged us with tales throughout his talk. A photo of a golden cape cobra with its head shoved into cracked camelthorn bark. Mike said the group watched as the snake disturbed a skink that ran from the hole and was promptly snatched and eaten by a pale chanting goshawk (a name which Mike loves.)


The gemsbok is an iconic animal of the Kgalagadi Transfrontier Park.


A typical Kgalagadi waterhole.


Left to right: Rod Patterson, Karl Switak, Lori King, Rod's son-in-law Fred.


A beautiful camelthorn.


A herd of springbok, the national animal of South Africa.


Lori's flipflops the morning after being left outside the cabin.


A yellow mongoose interrupted a photo session with a dead Cape cobra. "Rik-tikki-tikki, the ivory-fanged, the hunger with eyeballs of flame"


A western three-striped skink, Trachylepis occidentalis.


This park ranger was keeping two mole snakes for demonstrations.


This Cape cobra, Naja nivea, was found outside the boundaries of the park, and so could be captured and posed without breaking any rules.

A ranger later confirmed that the hawks frequently follow the snakes for just this reason. When Mike attempted to photograph a dead cape cobra, he showed us a photo series of the event. First a photo of cape sparrows disturbed by the snake's proximity, then photos of a marauding yellow mongoose that seized the snake and dragged it into the bush. Better than the pictures Mike was planning on getting.

A black-necked heron in a spot hundreds of kilometers from the nearest water. Herds of springbok, the national symbol of South Africa, which look like gazelles but are not. "The place is lousy with raptors. There have been 50 species of raptors reported from the park and there's 35 that are resident." A snake eagle, its name reflecting its diet. A red hartebeest. A photo of gemboks surrounding a water hole, with others in the distance patiently waiting their turn under the shade of camelthorns.

Mike showed us a book photo of a brown cape cobra found farther south. He supposes the darker colors help with thermoregulation in the more temperate climate. The bright yellows of the cobras in the north probably developed as a response to the high temperatures but may also act as a warning to potential predators. The cape cobra is the most toxic of the African cobras. A bite has been known to kill a human within an hour.


A fork-marked sand snake, Psammophis trinasalis. This elegant creature is reminiscent of the North American whipsnakes.


His majesty.


His royal highness looked somewhat less majestic when he began to get to his feet.

An encounter with a ranger who kept snakes led to photographs of mole snakes (Pseudaspis cana) that resemble our bullsnakes in several respects. Mike wondered why they aren't more visible in the pet trade. We saw a photo of a fork-marked sand snake (Psammophis trinasalis), a pretty snake that looks like a whipsnake. Most of these seen by the group were too quick to photograph, but one cooperated by crawling under the car where Mike could capture it. We saw photos of a male lion they spied close by the road, this one not accompanied by three or four other cars. The first shot was of the regal animal looking directly at the camera. The second was a not so regal pose of the animal getting up. It's got to be exciting to watch as a lion calmly strolls beside your automobile.

Mike ended with a shot of the roaring sands of Witsand Nature Reserve. These sands are really loud when one walks on the slopes, a phenomenon which can be found on other dunes, including in the U.S., but perhaps not as loud.

When Mike had finished one of the audience asked when he would present again. I don't know when that might happen, but I know that we're looking forward to it. His talk took us to Africa and allowed us to experience his adventure. A fine offering from one of our own.

## Herpetology 2019

In this column the editorial staff presents short abstracts of herpetological articles we have found of interest. This is not an attempt to summarize all of the research papers being published; it is an attempt to increase the reader's awareness of what herpetologists have been doing and publishing. The editor assumes full responsibility for any errors or misleading statements.

## SPITTING BEHAVIOR IN THE CHINESE COBRA


#### Abstract

A. Paterna [2019, The Herpetological Bulletin 148:22-25] describes the ability of a captive Chinese cobra (Naja atra) to spit venom and presents a video analysis of a strike and spit maneuver. However, among the many specimens of $N$. atra raised by the author only the female examined in this study regularly displayed spitting behavior, and then only within the confines of its terrarium. Fang morphology of $N$. atra was investigated by microscopy and compared with that of a "true" spitting cobra, Naja sputatrix. The results show that $N$. atra does not have specially modified fangs so that venom is ejected downwards from the fangs, not forwards. Consequently, to direct venom at a target requires a specific maneuver involving a forward lunge and head rotation. This arrangement is very similar to that described for Naja kaouthia and suggests that the evolution of spitting behavior could precede the development of specialized fangs that refine the action.


## MOVEMENTS OF NORTHERN VIPERS

R. J. Hodges and C. Seabrook [2019, The Herpetological Bulletin 148:1-10] note that northern vipers (Vipera berus) are well known to migrate from their wintering areas in springtime to forage and/or reproduce and then eventually return to the same wintering areas to hibernate. Less well known is their capacity to emigrate, and the authors suggest that this can be recognized when a viper selects a new wintering area at least 150 m from that used previously. Evidence is provided showing that there are two significant opportunities for emigration. First, neonates may wander considerable distances from their place of birth before selecting their hibernacula. Second, in the following spring some of the emergent juveniles disperse from the neonate-selected wintering areas but lack the homing ability to return to them and are consequently obliged to select new hibernacula. The subadults and adults developing from them have sufficient homing abilities to return to the wintering areas they occupied as juveniles. Only $45 \%$ of males and $23 \%$ of females showed signs of emigration and, interestingly, males emigrated over significantly greater distances than females. The direction of viper displacements in springtime varied considerably being influenced by the position of the sun, topography, weather, barriers to movement, and corridors of cover. Irrespective of migration direction, the sub-adults and adults appeared to make accurate returns to their wintering areas. The return of many adult males to these areas was commonly prior to their second molt and close to mid-summer; much earlier than reported previously. This is interpreted as an opportunity to occupy a warmer area to facilitate repopulation of the testes with spermatocytes prior to hibernation and is equivalent to the behavior of gravid females that remain in the wintering area to promote the development of their embryos. But unlike females the males remain hidden from view until the autumn. The significance of neonates and juveniles as the life stages that emigrate is discussed in relation to viper reintroduction programs.

## SMOKY JUNGLE FROG ALARM CALLS

R. Hopkins and B. Folt [2019, Journal of Herpetology 53(2): 154-157] note that Neotropical frogs in the family Leptodactylidae frequently emit a loud scream upon being captured by predators, and the leptodactylid scream call was first classified as a distress call functioning to startle would-be predators into releasing prey frogs. Other authors, however, have suggested that scream calls function to warn nearby conspecifics of a predator threat (i.e., an alarm call) and/or to attract larger secondary predators to distract and/or predate the primary predator. This study used a repeated-measures playback experiment to test whether Leptodactylus savagei (smoky jungle frog) in Costa Rica responds to scream calls in ways consistent with the call functioning as an alarm. If scream calls emitted by individuals during predation events serve to warn nearby conspecifics of a predator threat, it was predicted that scream calls would elicit elevated flight responses compared to when individuals are exposed to advertisement calls or control gray-noise treatments. Five primary behavioral responses were observed: individuals flattened their bodies, faced their dens, fled into the dens, faced the audio treatment, and called back with a territorial vocalization. Behavioral responses differed by treatment: scream calls elicited a greater proportion of flight responses whereas advertisement calls caused individuals to demonstrate more interest in the call (particularly females). These results suggest that $L$. savagei respond to screaming calls from conspecifics by fleeing in ways consistent with the call functioning as an alarm. Future studies are needed to test whether scream calls also function as a distress call and/or to attract secondary predators.

## TRANSLOCATION OF GREAT CRESTED NEWTS

J. Box et al. [2019, The Herpetological Journal 29(2):82-94] note that the great crested newt, Triturus cristatus, is a European Protected Species. Its legal protection requires that appropriate measures be developed for populations threatened by development in order to demonstrate no likely detriment to the maintenance of the favorable conservation status of the species in its natural range. A major regeneration project at a site near Neath Port Talbot in South Wales, UK, resulted in the destruction of the breeding sites and associated terrestrial habitats of a population of great crested newts. Capture and translocation of 9500 newts of all life stages was undertaken between 2009 and 2016 to an adjacent receptor site with water bodies and extensive terrestrial habitats. Eggs and larvae have been observed in water bodies in the receptor site throughout the monitoring period from 2013 to 2017, and great crested newts are colonizing new water bodies. The translocated population was much larger than predicted from the baseline surveys of water bodies on the development site. The design, planning and licensing of mitigation and compensation schemes for great crested newts threatened by development projects need to give full weight to the limitations of survey methods when estimating the size of a population.

## FEEDING FREQUENCY IN YELLOW ANACONDAS

B. F. Camera et al. [2019, Journal of Herpetology 53(1):47-52] note that size and function of digestive organs in snakes are modulated by feeding frequency and by the energetic demands of reproduction. This allows snakes to minimize costs and maximize the energetic gains from predation. Examination of yellow anacondas (Eunectes notaneus) acquired from sustainable management activities provided an opportunity to study the predation in this species. Field evidence poses doubts on the historical assumption that they are infrequent feeders. The authors probed this question by analyzing data of postprandial modulation of stomach, liver, kidneys, and heart, as well as fat bodies in the light of foraging theory. This allowed evaluation of intersexual differences in the allometry of such structures. Analysis of 95 snakes showed that both sexes have similar organ masses. However, livers in females were $55 \%$ larger than in males. This study also shows, for the first time, the postprandial hypertrophy of a digestion-related organ in a wild snake. In specimens with prey in their intestines, postprandial response was significant for only the liver ( $57 \%$ of increase). No other organ presented postprandial hypertrophy. The biggest prey represented $23 \%$ of the snake's body mass, and the prey mass had no significant effect on organ mass. The meager or absent postprandial hypertrophy observed here is similar to frequent foraging snakes. The abundance and levels of consumption of small prey are high in habitats occupied by yellow anacondas at the study site. The authors believe that field data and physiological postprandial responses allow yellow anacondas to be regarded as active foraging snakes that feed frequently.

## SALAMANDERS ON THE VERGE

A. Hernandez et al. [2019, The Herpetological Bulletin 148: 15-21] note that Mexico is a hotspot of salamander diversity and harbors 18 species of the genus Ambystoma (Amphibia: Urodela) widely distributed from the Sierra Madre Occidental to the Trans-Mexican Volcanic Belt. These species are highly threatened by various factors and some of them are considered nearly extinct in the wild. The Michoacan stream salamander, Ambystoma ordinarium, and the yellow-peppered salamander, A. flavipiperatum, are two endemic and scarce species from Mexico living in isolated and declining populations. Few observations have been made on them in their natural habitat since their original description. This study reports new data regarding the biology and habitats of $A$. ordinarium observed at Rio Bello, $2,120 \mathrm{~m}$ a.s.1., Morelia city, Michoacan state, and for A. flavipiperatum at Sierra de Quila, 2, 165 m a.s.1., 100 km south from Guadalajara city, Jalisco state. For A. ordinarium the authors found one neotenic adult male and two dead adult females in a small shallow stream located within a fragmented fir, oak and pine forest. For $A$. flavipiperatum they recorded an adult male and a female both neotenic, one clutch of eggs, and eleven larvae inhabiting a slow-moving stream located through a riparian habitat surrounded by a large pine-oak forest. These observations confirm that both species are highly endangered, capable of facultative neoteny and occur in small slow-moving streams surrounded by coniferous forests. Morphology, geographical distribution and conservation status are discussed.

## TIGER SALAMANDER WHITE BLOOD CELL PROFILES

H. L. Waye et al. [2019, Copeia 107(1):138-143] note that physiological responses to stress are important indicators of the effects of environmental disruption on individuals and, therefore, a way to determine the health of populations. These responses can be measured in a variety of ways, including the survey of differential counts of white blood cells. Baseline cell numbers and neutrophil to lymphocyte ratios have been determined for a number of species in the genus Ambystoma, but not for A. tigrinum, and baseline values are necessary for assessments of stress in natural and captive populations. The authors counted white blood cells in blood smears from long-term captive and recently captured eastern tiger salamanders $(A$. tigrinum) and compared the proportions of each cell type between these two samples. They also compared the results to the published values for other post-metamorphic or paedomorphic ambystomatids. Mean neutrophil to lymphocyte ratios, a measure of stress, were higher in the captive salamanders ( 0.81 ) than in the wild sample ( 0.41 ), as were the mean number of basophils (36.0 for captive and 10.3 for wild). The cell counts for the wild salamanders were comparable to those for other unstressed ambystomatids. These results suggest that long-term captive salamanders are under a small degree of stress and are not a good source of baseline values for this species.

## BEHAVIOR OF TRANSLOCATED ADDERS

D. J. Nash and R. A. Griffiths [2018, The Herpetological Journal 28(4):155-159] note that translocation of animals from sites scheduled for development is a widespread but controversial intervention to resolve human-wildlife conflicts. Indeed, reptiles are very frequently the subject of such translocations, but there is a paucity of information on the fate of such animals or how their behavior compares to residents. In 2014, a population of adders (Vipera berus) was translocated from a development site in Essex, UK. A sample of snakes was fitted with external radio tags and tracked for a period of 10 days during the spring. This exercise was repeated during the summer using a combination of translocated and resident individuals. Translocated males exhibited significantly greater average daily movements than resident conspecifics. Furthermore, all translocated males undertook long-distance, unidirectional movements away from the release site. In contrast, all translocated females remained within 50 m of the point of release. One of the males returned to the donor site, crossing large areas of unsuitable habitat in doing so. Translocated males also maintained significantly larger total ranges than resident conspecifics. No differences in range sizes were observed between translocated and resident females. The dispersal of male snakes from the release site may increase the risk of mortality of translocated snakes and reduces the likelihood of establishing a new population. Interventions to encourage the establishment of new home ranges within the boundaries of release sites may include mechanisms to prevent dispersal immediately following release.

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## Minutes of the CHS Board Meeting, November 15, 2019

Rich Crowley called the meeting to order at 7:42 P.M. Board members Dan Bavirsha, Tom Mikosz, Cindy Steinle, Sammy Velazquez and Jessica Wadleigh were absent. Minutes of the October 18 board meeting were read and accepted.

## Officers' Reports

Treasurer: The financial report for the month of October was not yet available; John Archer will email it to the board members when he completes it.

Media Secretary: Kim Klisiak is looking for feedback from the board regarding the new website design. She would like input on a variety of things, including colors and fonts, what features and links should be retained, what new features and links might be added. There will be a soft launch for the board to make such feedback possible.

Membership Secretary: Mike Dloogatch read the list of expiring memberships.

Sergeant-at-arms: Mike Scott reported 42 people in attendance at the October general meeting.

## Committee Reports

Shows: Gail Oomens reported that we will be displaying animals
at the Pheasant Run Resort's Family Fun Fest in St. Charles, December 28-29.

ReptileFest: Frank Sladek reported that business-size cards advertising next year's 'Fest are in preparation. Photos for these will be chosen after the meeting.

Junior Herpers: About 20 attended November's meeting. Frank Sladek spoke about "Reptile Catastrophes." The December meeting will be a holiday party, featuring arts \& crafts.

Adoptions: Zorina Banas is now handling the adoptions.

## New Business

John Gutierrez volunteered to coordinate the December 18 holiday meeting.

John Archer reported that he may need to purchase an update to the QuickBooks software. Mike Dloogatch moved to authorize John to purchase the QuickBooks update for his computer at the cost of $\$ 300$. Mike Scott seconded the motion. The motion was approved unanimously.

The meeting adjourned at 10:28 P.M.
Respectfully submitted by recording secretary Gail Oomens

## Advertisements

For sale: highest quality frozen rodents. I have been raising rodents for over 30 years and can supply you with the highest quality mice available in the U.S. These are always exceptionally clean and healthy with no urine odor or mixed in bedding. I feed these to my own reptile collection exclusively and so make sure they are the best available. All rodents are produced from my personal breeding colony and are fed exceptional high protein, low fat rodent diets; no dog food is ever used. Additionally, all mice are flash frozen and are separate in the bag, not frozen together. I also have ultra low shipping prices to most areas of the U.S. and can beat others shipping prices considerably. I specialize in the smaller mice sizes and currently have the following four sizes available: Small pink mice ( 1 day old -1 gm ) , $\$ 25 / 100$; Large pink mice ( 4 to 5 days old -2 to 3 gm ), $\$ 27.50 / 100$; Small fuzzy mice ( 7 to 8 days old -5 to 6 gm ), $\$ 30 / 100$; Large fuzzy mice / hoppers (10 to 12 days old -8 to 10 gm ), $\$ 35 / 100$ Contact Kelly Haller at 785-224-7291 or by e-mail at kelhal56@hotmail.com

Line ads in this publication are run free for CHS members - $\$ 2$ per line for nonmembers. Any ad may be refused at the discretion of the Editor. Submit ads to mdloogatch@chicagoherp.org.

## NEW CHS MEMBERS THIS MONTH

Andres Alfonso<br>Julie A. Butkevich<br>Jessica Gravelle<br>Noah Hallissey<br>Liron Helmer<br>Caleb Krueger<br>Frank Loverde<br>Deb Mendell<br>George L. Morris<br>Mason Murphy<br>Danny Ortiz<br>Bruce Robertson<br>Amanda Rocker<br>Spencer Siddons<br>Alex Sullivan<br>Amod Zambre



## UPCOMING MEETINGS

The December meeting of the Chicago Herpetological Society was held on Wednesday, December 18, at the Peggy Notebaert Nature Museum, Cannon Drive and Fullerton Parkway, in Chicago. This meeting was our annual holiday party.
The speaker at the January 29 meeting will be Mike Stefani, a private breeder who specializes in monitor lizards.
Speaking at the February 26 meeting will be Mike Redmer, a biologist for the US Fish and Wildlife Service. Mike has been a CHS member since he was a teenager, and currently serves as the USFWS lead national biologist on the eastern massasauga rattlesnake.
The regular monthly meetings of the Chicago Herpetological Society take place at Chicago's newest museum-the Peggy Notebaert Nature Museum. This beautiful building is at Fullerton Parkway and Cannon Drive, directly across Fullerton from the Lincoln Park Zoo. Meetings are held the last Wednesday of each month, from 7:30 p.M. through 9:30 p.m. Parking is free on Cannon Drive. A plethora of CTA buses stop nearby.

## Board of Directors Meeting

Are you interested in how the decisions are made that determine how the Chicago Herpetological Society runs? And would you like to have input into those decisions? The next board meeting, will take place at 7:30 p.M., January 17, 2019, at Papa Passero's Pizzeria, 6326 S. Cass Ave., Westmont. If you think you might like to attend, please email rcrowley@chicagoherp.org.

## The Chicago Turtle Club

The monthly meetings of the Chicago Turtle Club are informal; questions, children and animals are welcome. Meetings normally take place at the North Park Village Nature Center, 5801 N. Pulaski, in Chicago. Parking is free. For more info visit the group's Facebook page.

## ELECTION RESULTS

As a result of the elections held November 20, 2019, the following officers and members-at-large will serve on the CHS Board of Directors for the year 2020.

President: John Gutierrez<br>Vice-president: Jessica Wadleigh<br>Treasurer: John Archer<br>Recording Secretary: Gail Oomens<br>Media Secretary: Annalisa Kolb

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[^0]:    * See: George L. Heinrich and Timothy J. Walsh. 2019. The Big Turtle Year: Looking for Wild Turtles in Wild Places. The Tortoise 2(4):40-53.

