

LSU

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Animal *Hoplosternum littorale*

Photo by Madison Sinopoli

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Letter from the Director...



Dear Museum Friends and Family,

Welcome back to the MNS Newsletter! We have a great edition filled with expedition reports from Bolivia, Indonesia, and Mexico, as well as highlights from the Fish Slam in Florida and the bird Big Day efforts, and teaching in the Galápagos.

One of the most exciting things we do at the MNS is to fledge PhD students into their exciting careers. Two outstanding PhD students recently graduated (see page 33). Andre Moncrieff (Brumfield lab) used data-rich museum specimens, fieldwork, and population and landscape genetics to study the ecological and evolutionary processes that drive the patterns in bird diversity in South America. Andre is currently a postdoctoral researcher with Curator Greg Thom here at the MNS. Jackson Roberts (Austin lab) focused his PhD research on the systematics and taxonomy of New Guinean snakes, specifically two different groups: the New Guinea Worm-eating Snakes and the New Guinea Keelback snakes. Jackson has taken a great job as the Zoological Collections Manager at the Sternberg Museum at Fort Hays State University. Jackson, his wife and two young boys, moved to Kansas last month. Both Andre and Jackson were outstanding members of the Museum community, fostering intellectual growth, laboratory skills, and field expertise in undergraduate and newer PhD students. As new students fledge, we also have the other end of the career spectrum, retirements. Dr. Rebecca (Becky) Saunders, our world-renowned Curator of Anthropology, retired in May 2023. For a write-up, too brief to list all her accomplishments (see page 34). We wish her the best in retirement!

I am happy to report that we have undertaken a full architectural program for our home, Foster Hall. The Museum sits at the apex of the LSU Quadrangle, nicknamed “the Quad,” and is in the heart of LSU. The Quad is the historic core of campus that holds the first group of university buildings constructed. Foster Hall was built in the early 1920’s to serve as the original dining hall for LSU. Anyone who has walked the halls of the MNS has realized the odd configuration, especially moving between floors, a reflection of the original kitchen being in the basement and the second floor being added decades later. The original cathedral ceiling of the first floor must have been spectacular. We plan to tackle renovations to Foster Hall in three phases, expanding teaching and collection space. With help from the College of Science under the leadership of Dean Cynthia Peterson, we plan to fund raise for phase one soon.

One of the many joys of being Director is seeing all the diverse accomplishments of the MNS faculty, staff, and students. I would like to thank all of you who have helped support the MNS over the decades and help us continue the important science and education efforts of our Museum Family.

All the Best,

Chris Austin



Foster Hall circa 1930

2023 Ornithology Big Day Report

by Eamon Corbett

Following the success of our first-ever Baton Rouge Big Day last year, the LSU Museum of Natural Science Ornithology graduate students set out to search every corner of East Baton Rouge Parish once again for this year's fundraiser. We started before dawn on May 4th, and 16 hours, 30 eBird checklists, and large quantities of caffeine later, we finished with an impressive tally of 121 species! Thank you to everyone who has donated generously to support our research; contributions can be made at lsufoundation.org/bigday2023. For the full recap of our day, read on!

Our three-person team – Anna, Eamon, and Quinn – met at 4am in the Garden District, where we quickly picked up our first two birds: singing American Robins and Northern Mockingbirds. We packed up Anna's car and headed north, to Sandy Creek Community Park, arriving with plenty of time to search for some nocturnal birds before first light. Barred Owls were calling almost as soon as we ar-

rived, but the hoped-for Eastern Screech-Owl made us wait. Finally, we heard a distant tremolo: got it!

Dawn brought a chorus of singing warblers: Hooded and Pine were the most common, but we quickly picked out Worm-eating and Swainson's, two key targets. Our early May Big Day date was a bit later in the spring than previous years, so we wanted to be sure to bank as many nesting species as possible, in case migrants didn't come through. We had good success in the pines and hardwoods of Sandy Creek, notching Acadian Flycatcher, Yellow-billed Cuckoo, Prothonotary and Kentucky Warblers, plus a few migrants like Tennessee and Magnolia Warbler, and a late lingering Ruby-crowned Kinglet. We added our first bird that we had missed last year – a pair of calling Red-shouldered Hawks – and at the last minute pinned down the most localized "must-get" bird at Sandy Creek: a Hairy Woodpecker. We left the park at 8:30am, a bit behind



Anna and Quinn search for nesting warblers at Sandy Creek

schedule (and missing Pileated Woodpecker) but with plenty of targets already checked off.

The next two hours were a flurry of targeted stops for species we wouldn't find later in the day. First, we knew that an ordinary-seeming roadside clearing was home to some of the only nesting Prairie Warblers in EBR, and soon picked out their buzzy, rising songs. Even better was the low two-note cooing of an Inca Dove – a bonus! Other nice additions to the total included Yellow-breasted Chat, Scarlet Tanager, Orchard Oriole, and Northern Flicker. We continued on to Baywood Park, where we encountered a Black-and-white Warbler and a Yellow-throated Vireo in the woods, before returning to our cars and finding our main target – Chipping Sparrow – in the parking lot. This part of the parish is remarkably rural, and we added plenty of common open-country birds on the back roads, including Loggerhead Shrike, Eastern Meadowlark, and Eastern Bluebird. Next, we searched a couple of pine stands for Brown-headed Nuthatch – no luck at the first one (though Red-headed Woodpecker was a nice consolation), but nailed it at the second. Based on eBird frequency data, that was our least common bird of the day so far!

There's one spot that can make or break an EBR Big Day: the Baton Rouge Landfill. We had advance permission to bird this restricted-access spot, and arrived at "the dump" in the late morning with plenty of target birds in mind. First, tramping through some thickets

yielded calling Eastern Towhees, male Common Yellowthroats, a female Blue Grosbeak, a small flock of White-crowned Sparrows, and a brilliantly-colored male Painting Bunting. The marsh habitat, though reduced from previous years, still had abundant Common Gallinules and nesting Pied-billed Grebes, and we even pinpointed an unexpected Boat-tailed Grackle among the large Great-tailed Grackle colony. Ducks are hard to come by in Baton Rouge in late spring, so we were lucky to add Blue-winged Teal and Ring-necked Duck on the impoundments. We ventured out onto a small mudflat to look for shorebirds. With the midday sun beating down, the heat made it a challenge, but in the end we were able tally a couple Spotted Sandpipers, a single Semipalmated Plover, around a dozen Least Sandpipers, and with them a single pale Semipalmated Sandpiper. We did lose one bird to the heat though – a possible high-flying Bald Eagle vanished into the haze, and that species would evade our binoculars for the rest of the day.

It was around lunchtime, but snacks and energy drinks would have to suffice, because we still had lots more to see! We headed southward into Baton Rouge proper with migrants in mind.

Our first stop was Arsenal Park and Capitol Lakes, in the shadow of the tallest state capitol building in the country. Groves of live oaks make this a good migrant trap, and despite the late date we had some good warbler diversity, including Yellow, Magnolia, American Redstart,



Least (left) and Semipalmated (right) Sandpipers, tallied at the dump

Tennessee, and even a very ratty-looking, lingering Yellow-rumped. A White-throated Sparrow and a pair of American White Pelicans were procrastinating their migration, and we added both to our list. By far the best bird, however, was a sharp male Blackpoll Warbler – this species is a rare late migrant in EBR, so doing the Big Day in May worked in our favor. By the time we left the capitol and headed towards LSU we

morants but ibis! With our brief views from in the car there was no way to separate White-faced and Glossy, let alone from the hybrids that appear regularly in Louisiana. But under Big Day rules, “slashes” can count if you haven’t already seen either species, so “White-faced/Glossy Ibis” made 117.

There wasn’t much daylight left, but there was enough to search the farm fields along Ben Hur Road, and we were quickly rewarded: a Dick-



Blackpoll Warbler, a surprise migrant at Capitol lakes



Quinn and Eamon scanning University Lakes for cormorants

had broken the 100 species mark for the day!

Our next few stops as the afternoon ticked on were in the vicinity of campus – at the University Lakes we netted two egrets, two cormorants, and a Baltimore Oriole, and at the LSU Bird Refuge we lucked into a Swainson’s Thrush and a Philadelphia Vireo. On the other hand, we couldn’t coax anything out of the oaks in the “enchanted forest” on LSU’s campus, and at the Mississippi River levee added only a Eurasian Collared-Dove, which brought us to 112 species. The East Baton Rouge record of 135 that we set last year was looking daunting to match, but we had enough possibilities left that we hoped to break 120.

At Farr Park we notched House Finch (which always seems to take a while to find on EBR Big Days), plus Common Nighthawks overhead, a later arrival that we had missed the previous year. Riverbend Park had good numbers of migrants, and we picked up Chestnut-sided Warbler and Veery there. It was getting towards evening as we drove along River Road to our next stop, and three dark, long-necked birds flew overhead – not cor-

cissel in one field, previously reported Upland Sandpipers in another, a large flock of Bobolinks in a third to hit the 120 species milestone, and Savannah Sparrows on the roadside to raise it to 121!

Last year we had had excellent luck around



Upland Sandpiper – a very uncommon bird in Baton Rouge

dusk at a marsh near the L'Auberge Casino, but this year that spot was inaccessible – we scrounged briefly for Swamp Sparrows, Sora, or Marsh Wrens in the few isolated patches of cattails by the road without success. As the sun set, we found a spot along the bank of the Mississippi River next to the casino and sat watching clouds of Cliff Swallows and nighthawks. Then it was off to Curbside Burgers for our first real meal of the day, and home for some much-needed sleep!

Our final tally of 121 species, though it didn't quite reach last year's total, is still the third-best East Baton Rouge Big Day that we know of, and the best for May. We found eight birds that we had not seen on our 2022 EBR Big Day or scouting, bringing our cumulative total to 154 species. By eBird's "Frequency" metric for the count period, our three worst misses were Rose-breasted Grosbeak, Pileated Woodpecker, and Broad-winged Hawk, and our best finds were Ring-necked Duck, Brown-headed Nuthatch, Prairie and Worm-eating Warblers, White-crowned and Chipping Sparrows, White-faced/Glossy Ibis, and Hairy Woodpecker.

We had a ton of fun on this Big Day, and we'll be back at it next year to take another shot at 135 (or maybe the statewide record of 221)! Please consider making a donation to the LSU Museum of Natural Science Ornithology graduate students at lsufoundation.org/big-day2023 – your generosity is so appreciated!



The team at the Mississippi River at sunset after 16 hours of birding and 121 species

Donation of Dr. William H. Baltosser Hummingbird Collection by Steve Cardiff and Donna Dittmann

The LSUMNS Section of Ornithology was very fortunate to recently receive the Dr. William H. Baltosser private collection of bird research specimens. Dr. Baltosser considered several institutions as repositories for his specimens, but ultimately he deemed LSUMNS as the best choice. This important collection comprised mainly of hummingbird specimens was used in various research projects during Dr. Baltosser's professional career, with impressive series of most of the regularly occurring USA species. Most specimens were prepared as study skins with partial skeletons but there are also a substantial number of full skeletons with saved feathers. A high percentage of the specimens have associated frozen tissues. This infusion of specimens at least doubles our previous holdings for some species including Black-chinned, Anna's, Costa's, Calliope, and Broad-tailed hummingbirds.

At least in part due to risks associated with shipping such a unique and fragile collection of specimens and frozen samples, the parties agreed that the best plan would be to "meet half way." So, on 3 March 2023, Dr. Baltosser headed south from Little Rock, AR and Collection Managers Cardiff and Dittmann headed north from Baton Rouge, and everyone rendezvoused at Shreveport, LA that afternoon. After taking possession of the collection and associated documentation, Steve and Donna then returned directly to LSUMNS, where the specimens are now safely secured until such time that they can be fully integrated into the main collection.

Dr. Baltosser is Professor (Emeritus) in Biostatistics, Molecular Systematics, Ecology at the University of Arkansas-Little Rock. We once again thank Dr. Baltosser for trusting LSUMNS to protect this unique set of specimens.

Specimens collected supported these papers:
<https://birdsoftheworld.org/bow/species/coshum/cur/introduction>

Baltosser, W. H. (1995). Annual molt in Ruby-throated and Black-chinned hummingbirds. *Condor* 97:484–491.

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Baltosser, W. H., J. M. Bush, M. G. Kleve and S. M. Post. (1998). Molecular systematics of hummingbirds occurring in northern Mexico, the United States, and Canada. Paper read at 1998 N. Am. Ornithol. Conference, at St. Louis, MO.



Image shows just a portion of the 325 hummingbird and swift study skins recently donated by Dr. William H. Baltosser. Many of these skins have associated partial skeletons and tissue samples, and there are another 75 or so flat skins and/or full skeletons with all feathers also saved. Photo by Donna L. Dittmann.

LSU Section of Ornithology Visits New Mexico by Steve Cardiff and Donna Dittmann

On 19 May 2023, five Section of Ornithology personnel converged on Kirtland, NM for a one week “mini-expedition.” Curator of Birds Nick Mason and ornithology PhD candidates Samantha Rutledge and Quinn McCallum travelled directly from Baton Rouge, and Collection Managers Donna Dittmann and Steve Cardiff first spent a few days at Fort Davis, TX before continuing on to Kirtland on the 19th. The purposes of the trip were to expand LSUMNS holdings of voucher specimens and tissue samples, and to provide additional field collecting and specimen preparation training and experience for our graduate students.

We were extremely fortunate to be hosted by longtime LSUMNS supporters, veteran international expedition volunteers, and highly regarded specimen preparators Donna and Greg Schmitt at their farm and marsh properties along the San Juan River at Kirtland. On the scale of expedition difficulty, this trip was definitely towards the “luxury” extreme with the Schmitts rolling out the red carpet and providing lodging, preparation facilities, some collecting gear and transportation, and much more. Near the top of the list of treats was our first experience with “Frito Pie.”

In addition to local collecting in riparian habitats at Kirtland, the group was able to spend three different days visiting scenic higher-elevation public lands east of the Kirtland-Farmington area where we were able to sample a variety of pinyon-juniper woodland and ponderosa pine forest habitats near the New Mexico-Colo-

rado border. It was also a treat to see the snow-capped southern Rockies and San Juan Mountains to the north in extreme southwestern Colorado.

The expedition generated about 175 new specimens for the collection, of which about half were prepared during the trip and the rest brought back frozen to Baton Rouge. We also returned with another 115 specimens prepared previously by the Schmitts on behalf of LSUMNS. So, with almost 300 new specimens safely back in Baton Rouge, this short trip was considered a huge success. Most of the specimens represent common species for that area but add important modern specimens with extensive data, tissue samples, and stomach samples. Perhaps more noteworthy in being relevant to ongoing LSUMNS research projects were a Purple Martin, a series of Dark-eyed Juncos, and a Great-tailed Grackle. Also interesting were specimens of breeding Dusky and Hammond’s flycatchers from the same location, a Lucy’s Warbler from near the northern extreme of the species’ distribution, and a nice series of Black-headed Grosbeaks.



Left to right: Dr. Nick Mason, Samantha Rutledge, Donna Schmitt, Greg Schmitt, Donna Dittmann, Steve Cardiff, and Quinn MacCallum

Pinola Aviary Benefits the LSUMNS Bird Collection by Steve Cardiff and Donna Dittmann

For much of its history, the LSUMNS Bird Collection has taken advantage of specimen donations from public and private zoos and aviaries to add new species to the collection that would otherwise be difficult or impossible to obtain. Dr. John P. O'Neill was particularly instrumental in developing and cultivating relationships between LSUMNS and many such live bird collections across the USA, and explaining to zoo/aviary managers that any birds lost to injury or disease were still important to museums as comparative examples of a species' plumages, skeletal or soft tissue anatomies, and genetics.

In recent years, our interactions with aviaries and the volume of donations have substantially declined as we deal with shortages of specimen preparation manpower and freezer space for storing carcasses. Also, captive birds are generally less valuable in comparison to wild birds in terms of usable data, and specimens are frequently damaged by necropsy procedures which also decreases the usefulness of those specimens for skeletons or cadavers. So, it's often the case that we simply can't justify continuing to accept all individuals of commonly kept species beyond having one to a few study skins, skeletons, or fluid-preserved specimens.

A recent dramatic exception to these trends right here in Louisiana is the Pinola Aviary of Shreveport. For the past ten years, thanks to coordination with Pinola founder Paul Dickson and Director Jacob Kraemer, LSUMNS has been one

of the primary recipients of Pinola material, with almost annual batches of specimens now totaling several hundred individuals to date. Most recently, Collection Managers Cardiff and Dittmann visited Pinola (for the first time since before the Covid-19 Pandemic) in March 2023 and returned with several extra-large ice chests full of specimens to be sorted and processed. Pinola has proven to be relatively unique among our cooperating aviaries in that A) they possess many bird species/plumages not represented or poorly represented at LSUMNS and B) necropsies are infrequent and so most specimens are completely intact and in relatively good condition and so are much more useful as skeleton, spread-wing, or fluid-preserved preparations or combinations thereof. Pinola specializes in waterfowl but also keeps an interesting variety of other exotics, focusing on captive breeding of threatened species from around the World. These acquisitions have substantially improved our holdings, especially in terms of juvenile plumages and anatomical preparations, not to mention genetic samples. Especially noteworthy are new species for LSUMNS such as Meller's Duck, Sunda Teal, Bernier's Teal, Fawn-breasted Bowerbird, and Chestnut-backed Thrush, nice series of Freckled Duck, Pink-eared Duck, Baikal Teal, Baer's Pochard, and Scaly-sided Merganser, and several important hybrid waterfowl.

Thanks again to Pinola Aviary for considering archiving their specimens at LSUMNS. You can visit the Pinola Aviary website at: <http://www.pinola.net>



Three new species of waterfowl for the LSUMNS collection courtesy of Pinola Aviary. From top to bottom: Meller's Duck, Sunda Teal, and Bernier's Teal.



Other exciting new waterfowl additions from Pinola Aviary include our first adult male Scaly-sided Merganser (top), and intergeneric hybrids between Hartlaub's Duck (*Pteronetta hartlaubii*) and Radjah Shelduck (*Radjah radjah*; middle), and between Falcated Duck (*Mareca falcata*) and Baikal Teal (*Sibirionetta formosa*; bottom).



We don't have room to illustrate all of the new additions from Pinola Aviary, but here are a few more particularly noteworthy selections: our first study skins of Ashy Wood Pigeon (top) and Bronze-tailed Peacock-pheasant (second from top), and totally new additions to the collection of Fawn-breasted Bowerbird (second from bottom) and Chestnut-backed Thrush (bottom). All photos by Donna L. Dittmann, and all specimens in these photos were prepared by Donna L. Dittmann.

Hunting for Hybrids in La Paz, Bolivia

by Anna E. Hiller

In December 2022 and January 2023, we, a team of seven ornithologists, carried out a joint expedition to the Andes of La Paz, Bolivia to survey the birds of the region over a two-month period. Our team initially consisted of two LSU-MNHN PhD students (Diego Cueva and me, Anna Hiller), two colleagues from MHNNKM (undergraduate student Nicole Avalos and Curator of Birds Miguel “Micky” Aponte), and our driver and ecotourism guide Herman Lijeron. This expedition was unusual in that, rather than visiting one or two localities for an extended period of time, to document all bird species present in the region, we instead visited many different localities. We selected field sites in a roughly north-to-south line, or “transect”, to investigate the contact zone between two species called “flowerpiercers”: *Diglossa brunneiventris* and *Diglossa carbonaria*. Flowerpiercers (Thraupidae: *Diglossa*) are a charismatic genus of tanagers known for their unique adaptation for feeding. *Diglossa* have a hooked bill that they use to pierce the base or “corolla” of flowers, allowing them to extract nectar from a wide variety of flowers without having the long, thin, specialized bills typical of pollinators like hummingbirds. Our goal? To find intergrades between these two flowerpiercer species (*Diglossa brunneiventris* and *Diglossa carbonaria*) and obtain the first genetic samples of these hybrids.

After packing gear at the museum in Santa Cruz we loaded up Herman’s van and drove two days along the new highway to La Paz, the highest elevation capital in the world. We started the

expedition by visiting several sites along the road from Palca to Lambate in the greater La Paz region. We selected this area because it was visited ca. 50 years earlier by ornithologist François Vuilleumier (former curator of birds at the American Museum of Natural History, AMNH, in New York) and he had collected “perhaps the most intermediate specimen” along that road (Graves, 1982). As luck would have it, on our very first complete day of field work, we pulled over to scan some promising road-side



Diglossa brunneiventris x *carbonaria*, La Paz
Bolivia

flowers and ... Nicole saw a bird that looked a little weird... it was a flowerpiercer with an orange belly like *D. brunneiventris* but without the moustache we would normally expect. We had found a hybrid!

Following talks with local community leaders to explain the project and get permission to work in the region we set out on our search. Armed with mist nets, binoculars, and cameras, we meticulously surveyed the chosen sites, sometimes trekking for over an hour to access remote locations along trails and even a pre-Incan road built out of rock set in the hillside. We strategically put mist nets up near areas of high avian activity, specifically where we detected flowerpiercers. Each individual we captured was carefully assigned to the respective species - *D. brunneiventris* or *D. carbonaria* - based on its plumage characteristics (color and pattern). And after roughly one week of work, near the community of Totoral in the shadow of the glacier-topped Cerro Illimani, we finally were able to mist net our first hybrid. Success!! We celebrated with a meal of pollo-broaster (fried chicken) and hot showers in an alojamiento we were able to find in town.

At the end of several weeks working along this road the team split up and took a week off for the Christmas holidays. Diego and I spent a relaxing time doing “touristy” things in La Paz like visiting the Tiahuanaco archaeological sight to see the Puerta del Sol and... catching up on laundry. After the New Year we were joined by two new members of the team, Sergio Pantoja, a student from MHNNKM, and long-time “Bolivian ornithology” aficionado and LSUMNS alum Ryan Terrill.

For the second half of the trip we worked along the main highway between La Paz and Coroico. We detected hybrids in Pongo, which had the highest abundance of flowerpiercers I had ever seen at any site... we estimated >500 individuals in the small valley, potentially due to the presence of an introduced flower Purple Foxglove (*Digitalis purpurea*) which the *Diglossa* seemed to love. Another fun wildlife-encounter in this region was getting to see Viscacha (*Lagidium viscacia*), or wild Chinchillas, frolicking over the rocky hillsides.

Interestingly, just down the road in the community of Chuspipata, we did not detect either species of flowerpiercer at all, despite individuals being found on two different LSU expeditions to area in the 1980’s. Stay tuned for more on what might be happening there! Despite the lack of our focal species though the area was full of birds, with multiple mixed-species flocks passing by every few hours. We were able to get access to a several kilometers-long private road and thus decided to spend a week surveying the area, ultimately detecting several species new for the trip such as the Golden-collared Tanager (*Iridosornis jelskii*), and the recently-split Fulvous Wren (*Cinnycerthia fulva*). We also documented several birds commonly associated with Chusquea bamboo like Undulated Antpitta (*Grallaria squamigera*) and Rufous-headed Pygmy-Tyrant (*Pseudotriccus ruficeps*).

Our next stop was a particularly exciting opportunity - we had obtained special permission to work in Parque Nacional Cotapata. After meeting with park officials, we set out and sampled several different areas. One striking locality on the north



Left: White-browed Conebill (*Conirostrum ferrugineiventre*) Right: Torrent Duck (*Merganetta armata*)

side of the park (Tiquimani) yielded incredibly pristine habitat. After crossing a snow-covered mountain pass, we followed an unpaved road down into a valley covered by stunted vegetation. With time the gravel disappeared and gave way to a narrow stone pathway, another pre-Incan road. We walked this trail daily, descending almost an hour in order to reach elevations with flowerpiercers present, fording pristine mountain streams and passing red petroglyphs painted onto the mountainside. Only *Diglossa brunneiventris* occurred at this site with no hybrids detected, but we did document another species of particular interest to our group, the Tawny Tit-Spinetail (*Sylviorthorhynchus yanacensis*), a species with three disjunct populations which show morphological variation, likely representing undescribed taxonomic diversity.

Our last site, which we had spent almost a month trying to get access to (with difficulty due to the presence of mining activity in the region), was exactly in the middle of the two localities where

we had detected hybrids previously. Thankfully after several meetings and presenting our work to the community of Pichu we were granted access to the private road we needed to use to reach the high elevations where flowerpiercers occur. After ascending almost two hours and ca. 1700m in elevation we heard the distinctive trills of flowerpiercers coming from a large patch of red-and-purple *Brachyotum* (Melastomataceae), another of *Diglossa's* favorite flowers. Due to time constraints (and severe flooding of our tents and the bridge leading to the road!) we were only able to spend three days at this site but even during this short time we made important discoveries. We detected not only several hybrids but also individuals of both parental species (in the same mist net!) which to our eyes looked completely “normal”. This is the first documented example of “syntopy”, local range overlap, of *Diglossa brunneiventris* and *Diglossa carbonaria*, which provides evidence that these species mate at least somewhat “assortatively”



December 2022 team Anna Hiller, Diego Cueva (PhD student LSU), Miguel Aponte (Curator of Birds MHNNKM), Herman Lijeron (driver & eco-tourism guide), and Nicole Avalos (undergraduate student MHNNKM) at the summit of the road from Palca to Lambate.



January 2023 team Diego Cueva, Anna Hiller, Ryan Terrill (research associate LSU), Sergio Pantoja (undergraduate student MHNNKM), Miguel Aponte, and Herman Lijeron working on the “Death Road” in the community Chuspipata.

(prefer to pair with their own species). We also made several important contacts with local communities in this area and hope to return for more sampling and observations in the near future.

The areas we visited over the course of the expedition were filled with natural beauty and rich biodiversity. We visited a variety of habitat types including rocky slopes above tree line, high-elevation arid scrub, stunted montane forest (where *Diglossa* were abundant), and upper montane cloud forest (Yungas). The data we obtained fill important sampling gaps in a region where many birds, in addition to *Diglossa*, show turnover between species or subspecies (termed a “suture zone”; Vuilleumier, 1969). Whether secondary contact or hybridization occurs in these groups is yet to be determined. One of the most intriguing results of the trip though was documenting hybrid plumages in *Diglossa*. We obtained samples of 18 individuals exhibiting intermediate characteristics between the two parental species, displaying fascinating combinations of colors and patterns, highlighting the complexities of the hybridization process. For a detailed breakdown of all the sites we visited and the species of birds we detected see our trip reports in the eBird portal: Part I ebird.org/tripreport/116108 and Part

II ebird.org/tripreport/116109. In total we detected 364 species using 258 checklists, many with associated media (photos and recordings). The samples we collected will be used to investigate how hybridization has affected the genomes of these two closely related flowerpiercer species and whether hybridization has increased, stayed the same, or decreased with time and anthropogenic change in the region. Ultimately this research will provide insights into drivers of speciation in one of the most biodiverse regions of the world, the tropical Andes.

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Mammalogy Expedition to Mt. Gede on Indonesia's Most Populated Island, Java

by Heru Handika

After a five-year hiatus, we are back to conducting small mammal inventories in Indonesia. Our latest study site, Mt. Gede, is one of the tallest mountains on Java at 2,981 m elevation. It is only 62 km from the Indonesian capital and its biggest city, Jakarta.

Despite its proximity to Jakarta, Indonesia's national museum, and many universities, Mt. Gede remains somewhat mysterious to mammalogists. From brief expeditions to the mountain in 2010 and 2011, our lab described two new species of shrews, *Crocidura umbra* and *C. abscondita*. From the same fieldwork, we noticed a fascinating case of possible morphological character displacement. A Javan widespread species, *Crocidura monticola*, exhibits smaller body size on Mt. Gede where it co-occurs with its newly described sister species, *C. umbra*, than it does in other parts of the island. The early expeditions, however, lacked an optimum sample size and the elevational coverage was too limited to make the result conclusive. Returning to Mt. Gede would help us obtain more shrew samples and improve elevational sampling. Like our other fieldwork, we were also determined to improve our sampling for rodents.

Our fieldwork was a collaborative effort between LSU and the Indonesian National Research and Innovation Agency (BRIN). Our team from LSU included curator, Jake Esselstyn, and two graduate students, Austin Chipps and Heru Handika. We were accompanied by Nurul Inayah from BRIN, Inayah's student Fajar Alfian, and BRIN



Our team from LSU, BRIN, and Panthera mountaineering club posed in front of Mt. Gede national park resort before we hiked the mountain.

research assistant, Alfath Fanidya. The Panthera Mountaineering Club at Gede-Pangrango National Park provided us with logistical support.

Like most of our expeditions in Indonesia, we were faced with logistical challenges and unpredictable weather. Abundant land leeches, blood sucking invertebrates known in the Indonesian language as “pacet,” made the expedition a grueling experience for everyone. Our team, however, was highly motivated. We spent 33 days on the mountain, and were able to cover a wide range of elevations from the forest edge at 1,100 m to near the summit at 2,841 m. While some of our preliminary identifications are uncertain, our current estimate identifies at least 13 species of rodents and shrews, including more individuals of *C. monticola* and *C. umbra*. The new elevational data reinforces our earlier conclusions that *C. monticola* and *C. umbra* have only a narrow range of elevational range overlap on Mt. Gede. These new specimens and associated data will be essential for Austin Chipps’ dissertation, so watch for future progress on our understanding of how these species have evolved and interacted.

The new mammalian collection from this expedition is an asset for science and conservation. This new collection, when combined with samples from elsewhere on Java, opens an opportunity to study mountain adaptation and faunal change. Maintaining forest coverage in Indonesia is a challenge as the Indonesian population and economy are both growing rapidly. We expect that the results of this expedition will better inform conservation efforts on Mt. Gede and Java Island in general. This expedition will also serve as an important baseline for future expeditions.

We are grateful to the donors who have contributed to the Al Gardner and Mark Hafner Mammalogy Fund for supporting this and our other fieldwork. If you’d like to support future expeditions, please consider making a contribution. We are currently undertaking our next adventure to the mountains of Sumatra. <https://securelb.imodules.com/s/1585/17/interior.aspx?sid=1585&qid=1&pqid=2214&cid=3784>

Mid-elevation forest on Mt. Gede, West Java, Indonesia



Small Mammals in the Mountains of Southern Mexico by Austin Chipps

Itching to get out after a couple years of being limited to domestic travel, fieldwork has now taken us across the globe in 2023. We would kickstart our year in Oaxaca, Mexico in mid-January. Our team included Jake Esselstyn, Darwin Morales Martínez, and Austin Chipps from LSU. Pablo Colunga Salas from Universidad Veracruzana joined us, as did Livia León Paniagua, Lázaro Guevara, Isabela Vivas Toro, and former LSUMNS postdoc Giovanni Hernández-Canchola from UNAM's Ciudad Universitaria in Mexico City. The eight of us drove from Mexico City to Centro Ecoturístico La Cumbre Ixtepeji in the Sierra Juárez just north of Oaxaca City. Our main objective was to begin exploring shrew and rodent diversity in the mountainous southern region of Mexico. Secondarily, we explored the fea-

sibility of capturing large numbers of shrews alive so that their metabolic rates could be measured. Shrews have an exceptionally high metabolic rate compared to other mammals of similar size, and this aspect of their natural history has become an area of interest for Esselstyn Lab members.

In total we collected over 300 specimens comprising 5 shrew species from the genera *Cryptotis* and *Sorex*, approximately 7 rodent species from *Heteromys*, *Microtus*, *Peromyscus*, and *Reithrodontomys*, and 2 bat species belonging to *Eptesicus* and *Myotis*. At the end of the expedition, we worked with our collaborators to split the specimens that would be curated by UNAM and LSU.

Many of us on the expedition had a misconception of what the weather would be like in south-



Sorex shrew. Photo by Darwin Morales Martínez

ern Mexico at this time of year. While we had cabins to sleep in, our camp was at 2800m elevation and our trapping explored areas as high as 3000 m. Daytime temperatures were around 45-65F (7-17C), while nighttime temperatures dropped into the 30sF (0-4C). We relied heavily upon our fireplace and the wood that was provided by park personnel. The highlight of most nights was sitting around the fire to warm up after a long, cool day of preparing specimens.

We are thankful for our collaborators who treated us to great food and plenty of laughs during our stay. Weather aside, we couldn't have asked for a better group of mammalogists on this expedition. Opportunities to conduct fieldwork like this are what brought many of us to the Museum of Natural Science. Our expedition to Oaxaca served as a great starting point for continued collaboration in the neotropics, and we are now

excitedly planning our second trip to Mexico.

Thank you to the donors who have contributed to the Al Gardner and Mark Hafner Mammalogy Fund for supporting this and our other fieldwork. If you'd like to support future expeditions, please consider making a contribution at: <https://securelb.imodules.com/s/1585/17/interior.aspx?sid=1585&qid=1&pqid=2214&cid=3784>

Pictured from left to right: Lázaro Guevara, Isabela Vivas Toro, Livia León Paniagua, Darwin Morales Martínez, Pablo Colunga Salas, Giovani Hernández-Canchola, Austin Chipps, and Jake Esselstyn



The Ghost of Darwin is Everywhere Here

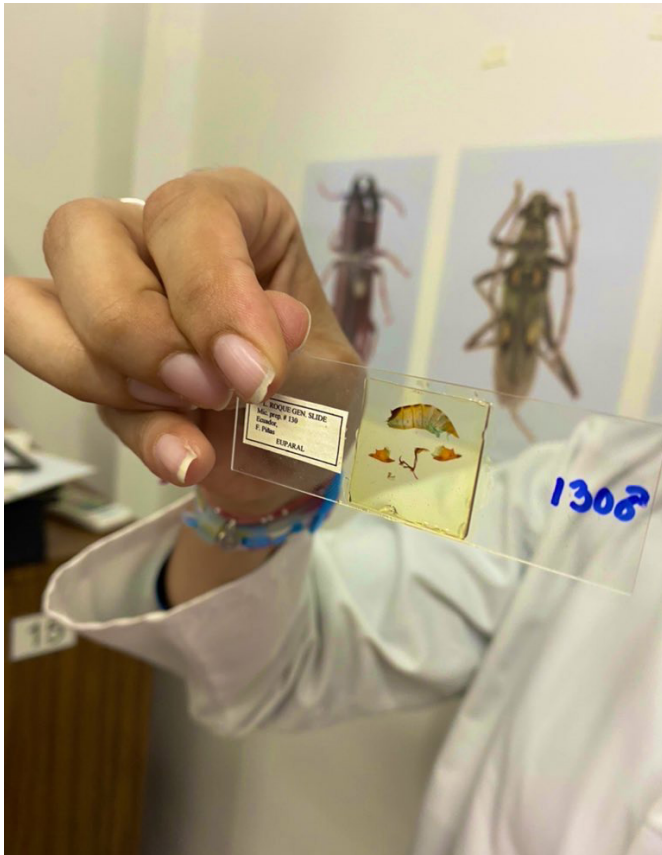
by Prosanta Chakrabarty

From June 7th to the 24th last year, I was able to travel to Ecuador and the Galápagos Islands as an instructor for two LSU Study Abroad classes, including Evolution. I have wanted to teach evolution in the Galápagos for some time, in fact this Study Abroad course was first planned for 2020 but cancelled twice due to COVID. It was therefore quite the relief to finally get to go this summer; and it was an absolute delight. This was the thirty-sixth country that I've visited (most of them for research) and the Galápagos Islands will be among my favorites for many reasons that I will get to shortly. I'm grateful that Dr. Dan Holstein, from the LSU College of the Coast & Environment, who has worked there several times, was there to

show me the ropes. Dan and I brought seven LSU undergraduate students with us, and as an added bonus - my family joined us for the first part of the trip in San Cristóbal. Dan is a marine biologist, and an incredible swimmer, so many of the activities he arranged were snorkeling fish surveys – something right up my alley. Despite their tropical location, the Galápagos Islands actually have rather cool marine waters surrounding it, something Dan studies for his research; we learned from him how the many continually changing currents impact the marine life. That includes the famous Humboldt Current bringing cold Southern Ocean waters up to equatorial South America. The Galápagos are of course famous for Darwin's



time there on his Voyage of the Beagle, but Dan who taught his Ecology course here also benefitted from Alexander Von Humboldt's legacy in this region too. Humboldt, was the most famous person besides Napoleon in early 19th century Europe (read 'The Invention of Nature' by Andrea Wulf), and is often credited with founding the discipline of ecology. We were not all



After a few days in Quito visiting our host institute, the beautiful Universidad San Francisco de Quito ([USFQ](#)), the class headed to the Galápagos Islands. We would visit eight of these islands that can be found 600 miles off the coast of mainland South America. Their famous remoteness, and value for evolution research from Charles Darwin to Peter and Rosemary Grant, was never lost on us. Dan I would lecture every afternoon and it was amazing to infuse our lessons with the observations we had made out in the field (or vice versa).

There was one day where I discussed the adaptations of hawk moths to block predatory bat sonar with their genitalia (see Barber et al. 2022 for more) and the very next day a curator at the Darwin Research Station in Santa Cruz was showing us these very moths and slides of their funky genitalia.

that far from Chimborazo, the great mountain in the Ecuadorean Andes that Humboldt made famous by being the first European to climb it and to study how its fauna and flora changes with increasing elevation. That mountain reaching just above 20,000 feet was thought at the time of Humboldt to be the tallest in the world and is about 200km south of Ecuador's capital Quito which itself can reach over 10,000 feet in parts. All of us on the trip, as Louisianans, are used to living at sea level, so we felt the altitude of Quito. It was my first time experiencing the impacts of high altitude; I had hoped I had inherited more genes from my extinct Denisovan ancestors who apparently provide Nepalese and Indian sherpas on the Himalaya with adaptations for living and working in high altitudes (Simonson et al. 2015). We began our Galápagos adventures in Isla de San Cristóbal, one of the few inhabited islands, which together have a total population of only about 20,000 people, all concentrated in just a few urban centers; 97% of the islands are reserved within national parks. You can do little outside of these population centers without a guide, so local park rangers escorted us on all of our excursions. We were glad to have these knowledgeable and friendly locals with us. We spent a week in San Cristóbal, which gave the students a great perspective on the variation that exists even within one island. This island on the edge of the Galápagos undersea volcanic hotspot that created these landmasses, is one of the oldest of the islands at 4 million years old; but it also has sections that are much younger – and you can see the transition clearly as you move from soil rich highlands which also has a large freshwater lake - (El Junco; which is devoid of fish, sadly for me), to white sand beaches formed from the poop of parrotfishes and other coral munching critters (who chewed ancient reefs that don't even exist anymore). The youngest part of the island (near Cerro Brujo) in the northwestern section and it is full of lava rocks and a few short stubby plants and lichen. Much of the highlands on these islands include farmland, and the oldest established farms in all of the islands are in San Cristóbal. This farmed area is called 'El Progreso' and was founded in the late 1800s. Despite clear evidence of human impacts, including converted natural land like these farms and pastures,

the Galápagos islands are one the cleanest most eco-conscious places I've ever been. We would visit places I would call absolute paradise, with long stretches of soft sand and a view of a perfect turquoise ocean where we had only the ever-present Galápagos sea lions as our company. These spots had no bar, no bathroom, no infrastructure whatsoever reminding you of the impact of humans. Still even in these pristine areas, if you dig a little bit, you will see our legacy on the planet. Dan had students doing microplastic surveys using sieves and regular spaced plot areas, and just below the top layer of sand they found enough plastic (mostly objects carried by the currents from elsewhere) in a few short minutes to fill a small garbage bag. The Galapagueños all seemed to be on board with keeping the ecotourism model a relatively small operation; leaving most of the islands uninhabited and untouched (although also somewhat vulnerable to illegal foreign fishing vessels and other poachers – see Bonaccorso et al. 2021). We were in Ecuador during a period of unrest particularly in Quito. Indigenous mainlanders and others were fighting for their rights in the mainland, and even the Galápagos fishers were protesting expanded no-fishing seasons meant to protect the wildlife. Dan and I asked the students to come up with ways they would try to explain to

the local fishers, whose livelihoods were at stake, how they would approach discussing these added restrictions. I was proud that these students recognized their privilege but also came up with some brilliant ways of discussing long term sustainability as discussion points for explaining the need for shorter fishing seasons (with an understanding that in the end the fishers may be right). The nearly daily snorkels could be exhausting. As part of earning research credits students would do multiple surveys (in cool, if not frigid, water) identifying and counting the local fish fauna. We saw pufferfish, sharks, damselfish, wrasses, eels, mullet, sea horses, giant mobula rays and much more. The sea lions which were typically lazily lying around the shore line and sometimes the sidewalks and park benches, were playful underwater often circling us like curious puppies. The sea turtles too paid us no mind as we approached (minding the 6-foot limits imposed by the national parks). And that was one of the oddest things about the Galápagos, the animals often ignore you or even come up to you. On Española island I was shocked to be so close to albatross nests and blue-footed boobies and the many thousands of marine iguanas that you sometimes had to almost step over in order to continue on the trail. The mockingbirds (that Darwin studied intently)

(Top Row) Green Sea Turtle, San Cristóbal Giant-Tortoise, Bravo Clinid, (Bottom Row) Waved Albatross, Marine Iguana, The author with a Galapagos Penguin



and the famous Darwin's finches (which Darwin hardly mentions in any of his books) would land on your feet. The finches, mockingbirds, lava lizards, and of course giant tortoises varied enough by islands that even the students noticed without much prompting that they were distinct species. It was easy to see how Darwin could come here (he visited five islands over five weeks) and come to his conclusions about natural selection and the common origin of life on Earth. For me the lava lizards were the most conspicuously different on the various islands we visited. The marine fauna on the other hand was beautiful and abundant but not as diverse as you might expect – we saw about 35 species on our surveys, far fewer than we would see in some place like Indonesia or many other tropical island regions. This unique but depauperate assemblage was a frequent topic in our ecology and evolution classes. Española island had perhaps my favorite Galápagos species on it, you may be surprised to learn that this ichthyologist was enamored with a bird, the Waved Albatross (*Phoebastria irrorata*). Its strong features, dark eyes set on snow white feathers and yellow bill was simply stunning, that such a creature exists makes me wonder about all of life on Earth. On Española we saw several nesting pairs ready to continue their long-term (sometimes decades long) partnerships rearing the next generation. We visited several areas with Galápagos tortoises and these giants too left us in awe. There tank like frames, varied shell shapes (the islands are named after the saddle shape of the tortoises' carapace). They also make hilarious noises (although not as belchy and comical as the female sea lions which sounded like a raucous slumber party every night). We went to a rearing facility – La Galapaguera that had newly hatched tortoises too. One of my favorite moments at this hatchery was the entire LSU class cheering on one baby tortoise that had fallen onto its back, it righting itself after a few long minutes made us cheer like we had just seen Joe Burrow throw a touchdown pass against Alabama. The 'Baby Yoda' like slow growth meant that you would see individuals not much larger than the box turtles you encounter in the woods in Louisiana except that they would be only six years old. The giants of the giants were closer to one hundred or more. In our snorkels we'd run into sea turtles that seemed as big or

even bigger than the tortoises on land. It is no wonder why whalers and other early travelers would come here to refuel and take away these giants for food and profit. There are estimates that over 200,000 such giants were taken from land, and perhaps even more from the seas. We also stayed on the more heavily populated Santa Cruz and the young but massive Isla Isabela which still has an active volcano which we climbed (Sierra Negra). We swam through channels on other islands like Kicker Rock, which I think is named because of how much you have to kick to get through the rocks. I didn't like Kicker Rock as much as some of our easier snorkels but we did see massive porcupinefish and a surgeonfish, *Prionurus laticlavus*, which my former PhD student, Dr. Bill Ludt (now Curator at the Los Angeles Natural History Museum) studied for his dissertation. He studied that species and another that was thought to be a different species but for which he did some very good ecological, genomic and natural history sleuthing to discover that they were indeed the same. The one place Bill had trouble getting samples of this species from was the Galápagos, so it was nice to see that the characters he described were indeed mixed and variable in these islands as he predicted. My biggest disappointment was not being able to collect any samples from the islands as my permits did not come in on time. I did leave some tissueing tools behind in case they do become available soon. Perhaps unsurprisingly, collecting permits in the Galápagos are not easy to obtain. We were pleasantly surprised to be able to work on some finch research being done by the lab of Jaime Chavez (an Ecuadorian researcher who is based at San Francisco St. University in California). Using mistnets we caught finches near population centers and weighed and measured them for the Chavez lab's long term impact study. Apparently, these finches that were famously adapted for different seed sizes, and other specific niches, are learning that they like French fries too. We passed the island of Daphne Major a few times, which was made famous by Peter and Rosemary Grant in one of the greatest natural history evolution experiments of all time. They have studied every individual finch on that island for decades to see how the changing role of climate impacts survival of the different morphs/species that live

there (read the Pulitzer Prize winning ‘Beak of the Finch’ by Jonathan Weiner for more). Luckily the island remains uninhabited or we might get French Fry Finches there too (read Kurt Vonnegut’s ‘Galápagos’ if you want to see what might really happen in isolation, even to humans). Isabela truly was otherworldly – not just because of the volcanic landscape, but surely the best snorkel of the more than a dozen we did was in Los Tunnels where we swam through rocky natural archways and with baby Black-tip Reef Sharks (*Carcharhinus melanopterus*) in mangroves and saw adult Oceanic Whitetips (*Carcharhinus longimanus*) resting in their undersea caverns. In spots the water was as clear as a swimming pool, in others there were areas so dense with salps it seemed the entire ocean must be filled with them. Perhaps like Darwin the greatest insights about the Galápagos will come to the students once they return home. Several of them had never traveled abroad before and for their final group project one said, ‘every moment has been a learning experience.’ Who could ask for a better summary of a trip than that?

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[Update Dr. Chakrabarty is again in the Galapagos this July (2023) again teaching Evolution and also armed with collecting permits.]



Fish Slam 2023

by David Boyd with photos by Madison Sinopoli

In early May the Fish Section of the LSUMNS took part in a survey of invasive fishes in Florida coordinated by the United States Geological Survey and Florida Fish and Wildlife Conservation Commission (FWC). This was the fifteenth “Fish Slam” event since the program’s inception in 2013 and the first in the Tampa Bay area of Florida. Non-native fishes are rampant and diverse in Florida’s fresh waters, especially in the south where the climate is tropical, owing in large part to the state’s key role in the aquarium trade. Increasingly, invasive fishes are establishing populations further north, prompting this survey of the canals and rivers surrounding the robust aquaculture industry east of Tampa Bay.

The fish lab was chomping at the bit to get out in the field and help with the effort. Six of us made the day-long drive to Manatee County in the LSU research van and visiting researcher Dr. Rafet Ozturk drove separately from Baton Rouge. We shared an AirBnB at which we worked nights to fix and preserve each day’s catch. During the two-day program, the LSU crew (team name Chakrabarty Party) worked mornings at two assigned sites to collect fishes with dip nets, seines, and cast nets. In the afternoons we met up with other participants at the University of Florida Tropical Aquaculture Lab in Ruskin to share data on invasive species caught or observed. As the only out-of-state visitors and one of only three participating groups making specimen collections, our team was treated to first pick of the many spectacular fishes brought in by electrofishing teams.



Top: The Rio Grande or Texas Cichlid, *Herichthys cyanoguttatus*, is the only member of its family native to the United States—but not to Florida. Bottom: Brown Hoplo, *Hoplosternum littorale*, was introduced not through the aquarium trade but from import as a food fish.

The first morning, we sampled a large and unassuming pond behind a business park, the only known locality along the Gulf of Mexico of the invasive Goldline Snakehead (*Channa aurolineata*). The species was presumed eradicated from the pond by FWC in 2021 and fortunately we did not catch or observe any—although we thought we had, momentarily, when grad student Dan Sinopoli and undergrad Maddie Hamlin pulled a foot-long invasive Walking Catfish (*Clarias batrachus*) out of the water in the seine net. Sheila Rodríguez Machado coordinated the lab’s first concentrated effort to take flash-frozen tissue samples in the field on the bank of the pond with photographer Madison Sinopoli as we shuffled to stay in the shifting patches of shade beneath the trees. The police officer who showed up to check our licenses seemed appropriately bemused by the scene before him. The second morning, we sampled nearby Bullfrog Creek, where Duangsamorn Boyd dipnetted our only non-native find of the

day, an African Jewelfish (*Hemichromis letourneuxi*), while the rest of us marveled at the native freshwater flatfish and silversides in our nets.

The afternoon “check ins” at the aquaculture lab were the highlight of the trip. Fifty-eight biologists converged on the station with an array of dazzling, exotic fishes on ice, among them assorted cichlids, massive, armored catfishes, and the bizarre Pike Killifish (*Belonesox belizanus*). Many of those that were not taken as museum specimens... were thrown on the grill and sampled for taste. The Mayan Cichlid (*Mayaheros urophthalmus*) gets a thumbs up from us! The armored catfish, not so much. In total, 18 non-native species were recorded during the event, and more than 300 specimens and associated molecular samples were brought back to the fish collection at LSUMNS. More information can be found at www.usgs.gov/centers/wetland-and-aquatic-research-center/science/fish-slam-may-2023.

Left: Dan Sinopoli taking tissue samples from a tilapia. Right: group selfie (groupie?) at the UF Tropical Aquaculture Lab.





Top: Checking dip nets carefully for larval non-natives. We caught an armored catfish fry no bigger than a fingernail. Bottom: Dr. Rafet Ozturk demonstrating perfect cast net technique while fishing for invasive tilapia at the snakehead pond.



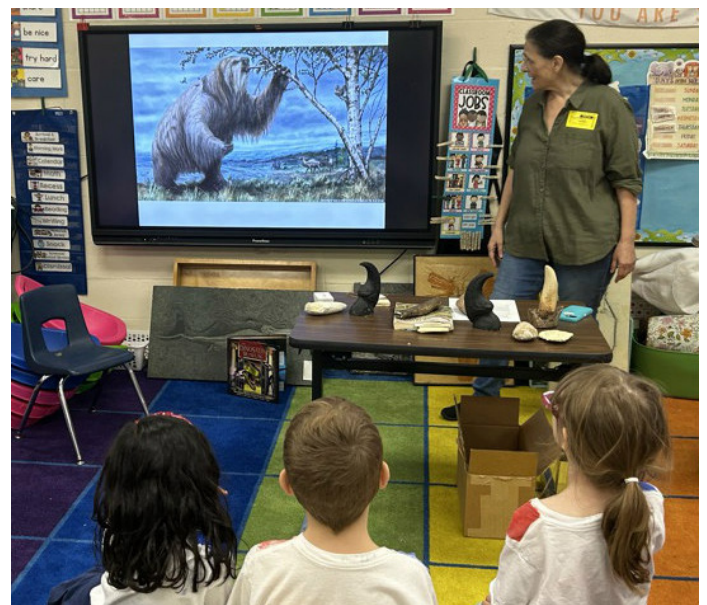
Paleontology Outreach

by Paula Gerdes, submitted by Lorene Smith and Mason Kirkland

Paula Gerdes, LSU alumna (B.S. 1982) and former volunteer worker for the vertebrate paleontology section of the Museum of Natural Science, borrowed teaching materials for a presentation at Westdale Heights Academic Magnet School in Baton Rouge. Just before the end of the school year, she and her husband Bob Gerdes, a fellow LSU graduate (M.S. 1982), were welcomed by kindergarteners and their teacher.

“We had a wonderful visit to Westdale Heights Academic Magnet School. We were invited by Ms. Foss’ Kindergarten class to share examples of dinosaurs they had studied through casts and exact replicas. The class examined a *Stego-*

saurus anterior dorsal plate, an *Allosaurus* skull cast and an *Allosaurus* claw, a coelurosaur footprint, an *Edmontosaurus* egg, a *Tyrannosaurus* tooth, and an *Iguanodon* thumb spike. We studied the full skeletal casts of an ichthyosaur, pterosaur, *Archeopteryx* and *Heterodontosaurus*. We were privileged to bring marine invertebrate fossils for the small group activity. The students looked at trilobites, and made fossil imprint keepsakes using Madagascar ammonites pressed into air-drying clay media. Our last fossil topic centered on large vertebrate fossils found in Louisiana, and we passed around a cast of a large ground sloth claw.”



Left: Paula Gerdes discusses the *Tyrannosaurus* tooth cast and its size. Right: Passing around the giant ground sloth claw. (Photos by Julie Becnel.)



Top left: Bob Gerdes holds a cast of the Solnhofen Limestone *Archaeopteryx* as students feel the relief of the imprint. Top right: Ellis Becnel assists by sharing the cast of the pterosaur *Scaphognathus*. Bottom left: Checking out the jaws and teeth of *Allosaurus*. (Photos by Julie Becnel.) Bottom right: Ammonite fossil imprint in air-dry clay. (Photo by Paula Gerdes.)



MNS NEWS

Awards



Heru Handika

Heru Handika received the American Society of Mammalogists' Murie Family Conservation Award. This award is given to a student or recent graduate who has contributed to the conservation of mammals or their habitat. Heru's work focuses on mammalian diversity and evolution in Southeast Asia and software development.



Samantha Rutledge

Samantha Rutledge was awarded the National Science Foundation's Graduate Research Fellowship Program (NSF -- GRFP). The five-year fellowship provides three years of financial support for recipients and their research. The NSF GRFP is awarded to outstanding students performing research in the STEM. Sam's research works to understand the structures involved in iridescence in bird feathers by integrating spectroscopy, microscopy, and photography.



Daniel Sinopoli

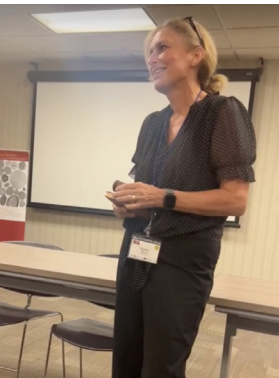
Dan Sinopoli was awarded the SeaGrant Superior Graduate Student Award. This is awarded to graduate research which improves the sustainable use of ocean and coastal resources. Dan's work uses molecular and geometric morphometrics methods to explore the relationships between spotted gar.



Quinn McCallum

Quinn McCallum was awarded a Postgraduate Scholarships-Doctoral (PGS-D) award from the Natural Sciences and Engineering Research Council of Canada (NSERC). These prestigious fellowships offer three years of support to Canada's top graduate students. Here at the LSUMNS, Quinn's dissertation research will focus on the comparative phylogeography of birds in *Polylepis* forests of the high Andes in South America.

New President of the Palynological Society



Sophie Warny, PhD

This summer, Dr. Sophie Warny started her two year term as President of the Palynological Society at the annual conference at the University of Kentucky in Lexington this summer. During this time she will co-organize the next two international conferences, one in Montpellier France in 2024 and one in Rabat Morocco in June 2025.

MNS NEWS

Graduates



Andre Moncrieff, PhD

Andre completed his PhD under Dr. Robb Brumfield in the Spring of 2023. He stayed with the LSUMNS and is currently working as a postdoctoral fellow under Dr. Greg Thoms.

Jackson Roberts, PhD

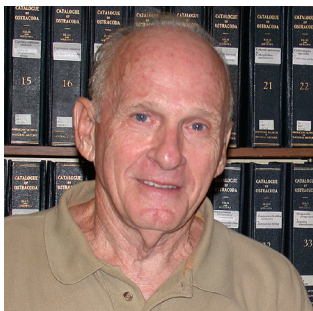
Jackson completed his PhD under Dr. Chris Austin in the Summer of 2023. He is now at the Fort Hays State University Sternberg Museum of Natural History as the Zoological Collections Manager.



In Memory

Alvin M. Phillips Jr.

Alvin M. Phillips Jr., retired collections manager of microfossils and invertebrate paleontology, passed away on June 1, 2022, at the age of 91. Born in Shreveport, Louisiana, Al earned his bachelor's degree at University of Oklahoma and came to LSU in 1958 as a student in the Geology Department's master's degree program. In September 1961, Al became a research associate in the Geology Department Museum, later known as the Museum of Geoscience, and retired from the Museum of Natural Science in 1998. He gave his time to others generously and continued to work as a volunteer with the collections for another ten years for which I am deeply grateful.



Retirement



Rebecca Saunders, PhD

The Museum Family wishes Curator of Anthropology Dr. Rebecca (Becky) Sanders a happy retirement. Becky retired in May 2023, but still resides in Baton Rouge and remains very active in many research projects. Becky is a native Floridian and received a B.A. from Florida State University in 1977 and a PhD from the University of Florida in 1992. She joined LSU in 1993 as the Regional Archaeologist for Southeastern Louisiana and became Curator of Anthropology at the MNS in 1994. Her research focuses on the archaeology of southeastern U.S. prehistoric and early historic Native Americans. She also has been involved in forensic archaeology, working with the United Nations in Europe. Her accomplishments here at LSU are too numerous to list, but importantly she has done an amazing job of training the next generation of anthropologists, leaving a lasting mark on the field. She has an enviable publication record and has received numerous prestigious grants including from the National Geographic Society, National Park Service, NASA, and the US Forest Service. Notably, she is part of a large group of researchers focused on studying the LSU Campus Mounds and work on educational outreach programs to promote the historical importance of the mounds on campus and other mound sites throughout Louisiana. She will continue this work into retirement. Her hearty laugh and generous smile will be missed at Curator meetings.



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