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A Citizen Science Herpetofaunal Inventory of Palmetto Island State Park in Southwest Louisiana, USA

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Abstract.—**The Louisiana Amphibian and Reptile Enthusiasts (L.A.R.E.) conducted a citizen science herpetofaunal inventory of Palmetto Island State Park, Vermilion Parish, Louisiana, USA, from January 2014 through June 2015. We used Visual Encounter Surveys (VES) as the primary detection method. We also used artificial cover, PVC pipe refugia, dipnetting, trapping, and listening for anuran vocalizations to detect amphibians and reptiles. Over 22 surveys, 12 unique volunteers recorded 1,366 detections representing 33 species of amphibians and reptiles at the park. We did not detect any new species over the last 10 surveys. We detected frogs and toads most commonly (62.5% of all detections; 10 species) followed by lizards (29.9% of all detections; four species). We detected only two snake species more than 12 times. We detected all 33 species in the inventory through VES and detected 12 species under tin used as artificial cover. As Palmetto Island State Park is the newest state park in Louisiana, one of our objectives was to use a team of citizen scientists to produce a herpetofaunal species list for the park, which will serve as a baseline for future studies of this area. In addition, we aimed to combine our surveys with education of visitors about the herpetofauna of the park through various outreach and education products and events.**

Key Words.—amphibian; artificial cover; bottomland hardwood forest; passive trapping; PVC pipes; reptile; visual encounter survey

Introduction

Citizen science may be a relatively new term but is not a new idea as public observations of natural phenomena have been recorded for centuries (Miller-Rushing et al. 2012). Citizen science is defined as general public engagement in scientific research activities where citizens actively contribute to science either with their intellectual effort, or surrounding knowledge, or their tools and resources (Socientize Consortium 2013); citizen science and volunteerism in science reviewed by Dickinson et al. (2010) and Bonney et al. (2014). Irwin et al. (1994) strongly advocated for citizen-involved science, stating that a better public understanding of science can be achieved if everyday people can be included in the scientific process as information generators, rather than solely information consumers. Scientists benefit as well from a cost-effective means to tackle research questions that otherwise could not be properly investigated without expansive data collection from many citizen scientists (Silvertown 2009; Miller-Rushing et al. 2012).

Some of the oldest and most recognized citizen science efforts in the U.S. focus on birds and include the North American Breeding Bird Survey (Sauer et al. 2013) and the Christmas Bird Count of the National Audubon Society (National Audubon Society [NAS]. 2018. The Christmas Bird Count historical results. NAS. Available from http://www.christmasbirdcount.org [Accessed 20 January 2020]). Technological advances and relatively widespread access to the internet has led to applications and websites, such as iNaturalist (https://www.inaturalist.org), where large numbers of people collectively document species occurrence that may be used in various scientific investigations over broad spatial scales (Silvertown 2009; Tulloch et al. 2013). Data gleaned from citizen scientist observations have been used in a taxonomically wide array of mapping and monitoring studies, as well as hypothesis-driven research (Silvertown 2009).

Whereas some citizen science databases like iNaturalist include a wide variety of taxa, some are specific to certain taxa, including two databases covering the USA with a herpetological focus. HerpMapper (https://www.herpmapper.org) is an online citizen science database designed to share information about global amphibian and reptile observations. In North America, the Herpetological Education and Research Project (H.E.R.P.) exists as an online database of amphibian and reptile sightings and information contributed by both citizen scientists and professional herpetologists (https://www.naherp.com). Citizen science efforts have been used to document trends in anuran occupancy as part of the North American Amphibian Monitoring Program (Cosentino et al. 2014; Weir et al. 2014; Villena et al. 2016). Herpetological

statewide atlases have been significantly aided by citizen scientists (Cunningham et al. 2012; Gibbs et al. 2007; Jensen et al. 2008; Price and Dorcas 2011). Smaller scale herpetological efforts have also been supported by citizen scientists (Pittman and Dorcas 2006; Smith et al. 2015; Ream et al. 2019). As museum acquisitions of physical specimens have declined over recent decades, citizen science projects and online databases are critical to document and maintain species distribution data (Spear et al. 2017).

Herpetofaunal inventories are a basic, but integral starting component of conservation efforts, as follow-up monitoring and management can be maximized with appropriate knowledge of what resides in an area and an understanding of the natural history of a species (Graeter et al. 2008). Here, we report the results of a citizen science herpetofaunal inventory of Palmetto Island State Park (PISP), Vermilion Parish, Louisiana, USA. Our objectives were both to establish a list of documented herpetofauna inhabiting PISP to serve as a baseline for further study and monitoring, and to engage park visitors about the herpetofauna found in the park.

Materials and Methods

Study site.—Palmetto Island State Park (PISP) is an approximately 525 ha coastal bottomland hardwood forest located in Vermilion Parish of southwestern Louisiana, USA, in the Gulf Coast Prairie and Forested Terraced Uplands physiographic region (U.S. Army Corps of Engineers 2016; Fig. 1). The park is the most recent addition to the Louisiana State Park system, opening to the public in October 2010, but the land has been owned by the state since 1981. Palmetto Island State Park is not an actual island, but rather an area of forested bottomlands dominated by an understory of Dwarf Palmetto (*Sabal minor*) and surrounded by agricultural lands. The Vermilion River serves as the eastern park boundary, emptying into Vermilion Bay approximately 13 km to the south. Three artificial ponds (about 0.4, 1.6, and 2.3 ha) connected by small channels occur in the park, which empty into the Vermilion River during rainfall events. In its 5 y participating in the annual Christmas Bird Count, people have found so many birds at Palmetto Island State Park that the park has consistently ranked among the sites with the highest species counts in Louisiana (Erik Johnson, pers. comm.). The park is also well known as the only public place to view the Vermilion Parish endemic Abbeville Red Iris (*Iris nelsonii*; https://friendsofpalmetto.org/abbeville-red-iris).

Survey methods.—Twelve volunteers conducted surveys on 22 dates from January 2014 to June 2015 (Supplemental Information Table S1). Nearly all volunteers were members of the Louisiana Amphibian and Reptile Enthusiasts (L.A.R.E.) group and had significant experience and competency in identification of the herpetofauna of the region, although no formal training of volunteers specific to this inventory was conducted before commencement. During surveys, all volunteers were within earshot of each other if assistance was needed to capture or identify herpetofauna. The first author, a professional herpetologist and the most

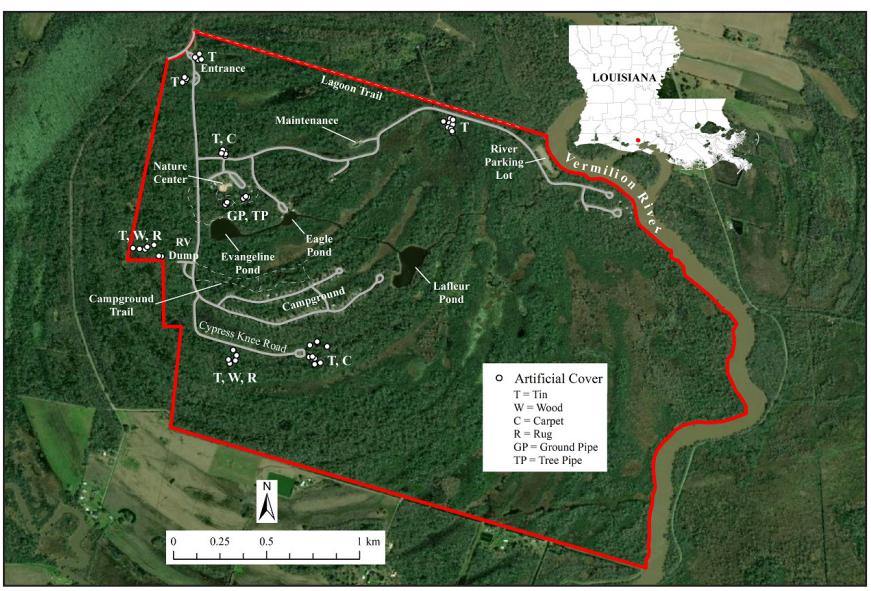

Figure 1. The boundary of Palmetto Island State Park, Vermilion Parish, Louisiana, USA, where a citizen science herpetofaunal inventory was conducted from 2014–2015. Artificial cover locations are noted, and the inset map of Louisiana shows the location of the park near the southwestern coast. Locations within the park correspond to the areas surveyed (Supplemental Information Table S1).

experienced volunteer, was present on 17 of the 22 surveys. For the remaining surveys, photographs were sent to the first author in the rare cases in which identification was uncertain. As this was an entirely volunteer effort, we conducted surveys almost exclusively on weekends with more frequent surveys during the first 4 mo of the inventory (January through April 2014) and slowing down to about one per month for the remainder of the inventory (Supplemental Information Table S1).

We used Visual Encounter Surveys (VES) as our primary detection technique, used on all but one survey, and searched within 100 m of easily accessible locations, such as roads, trails, and parking areas except when walking to more distant artificial cover (Crump and Scott 1994). In all surveyed areas, we casually searched habitats that we believed suitable for herpetofauna. If the varied habitats within an area had been searched thoroughly and additional time remained from the time allotted, we would move our search to a different area of the park. Concurrent with the VES, we also listened for anuran vocalizations, although we did not employ formal vocalization surveys using standardized methodology. The first author made all vocalization identifications.

We also used various artificial cover objects to detect amphibians and reptiles (Mills et al. 2013). Members of L.A.R.E. and the Friends of Palmetto Island State Park, Inc. donated artificial cover in the forms of tin, plywood, carpet, polyvinyl chloride (PVC) pipes, and an old rug to use in the inventory. As everything was donated, nearly every piece of artificial cover and PVC pipe had unique dimensions as detailed in the publicly available data release (https://www.researchgate.net/publication/338866511_LARE_Palmetto_Island_State_Park_Citizen_Science_Inventory_Data). We set out tin, plywood, and two rug pieces on the first survey, additional tin and carpet on the second and third survey, and the last of the tin on the ninth survey. On the ninth survey, we also put out PVC pipes (all approximately 80–100 cm in length) in a wetland area for the detection of treefrogs. We hung five PVC pipes (one 2.54 cm dia., two 3.81 cm dia., and two 5.08 cm dia.) from trees on the trunk at about 2 m in height and we pushed five (four 2.54 cm dia., one 5.08 cm dia.) into the ground (Glorioso and Waddle 2014). By this ninth survey, we had a total of six coverboards (total area = 5.98 m^2), eight carpet pieces (total area = 9.76 m^2), two rug pieces (total area = 3.46 m^2), five ground pipes, five tree pipes, and 28 tin pieces placed in the park (total area = 30.55 m^2).

We selected sites for cover objects based on both accessibility to us and the decreased likelihood that park guests would happen upon our materials. We noted the location of all artificial cover and pipes with GPS and gave each a unique name (https://www.researchgate.net/publication/338866511_LARE_Palmetto_Island_State_Park_Citizen_Science_Inventory_Data). We did not check artificial cover and pipes on every survey due to time constraints, but we checked some of the artificial cover on all but two surveys after initially setting the first batch. Typically, we checked the groupings of artificial cover in the area where we were conducting VES for that survey. The two rug pieces decomposed after 4 mo and two of the plywood pieces were no longer functional after 10 mo.

We used several approaches to survey for aquatic species. We dipnetted shallow wetlands concurrently with VES on the first two surveys as well as the seventh survey (Todd 2013). This was not a systematic dipnet survey, but rather the first author simply carried a dipnet during VES to make sweeps in wetlands in the search area targeting salamanders that are either only or most easily detected in the water. We performed limited passive trapping with minnow traps, pillow traps, and hoop nets for herpetofauna due to time constraints of this volunteer effort (Willson 2013). We attempted overnight trapping using minnow traps on two occasions for one night each in April 2014 and February 2015 with 12 and 30 total traps, respectively. We did not bait minnow traps in April 2014 but did bait all minnow traps in February 2015 with boneless chicken chunks. We baited two pillow-style traps with a can of sardines each in April 2014. The park was not close to homes of any of the volunteers, making it difficult to return to the park the following day to check traps. As an alternative, we attempted an active capture technique for turtles with deep-water crawfish nets (Glorioso and Niemiller 2006). In addition to the aforementioned logistical issues of passive turtle trapping with this volunteer effort, we possessed only three large-mesh hoop nets. In our single attempt at passive turtle trapping, we set these three nets, each baited with a can of sardines, in different places in the park in April 2014.

For every amphibian or reptile detection, we recorded the following: date and time of observation, species, life stage (egg, larval, juvenile, or adult), sex (if known), substrate, detection technique, GPS coordinates, and whether photographic vouchers were taken. We did not collect any herpetofauna for museum deposition and relied solely on voucher photographs to confirm identifications for several reasons. Foremost, in recent times, there tends to be less desire to euthanize healthy animals, particularly in areas where they are expected or known to occur. In addition, we did not have the funding or facilities to properly fix and preserve specimens and accession them into a museum, nor were we permitted to remove animals from the park. To reduce stress on the animals, we only captured amphibians and reptiles when needed to aid identification or secure voucher photographs and all were returned to their original point

of capture as quickly as possible. We followed Crother (2017) for scientific and standard English names.

Results

In 22 surveys spanning 1.5 y, we detected 33 species of amphibians and reptiles at Palmetto Island State Park (Table 1; Supplemental Information Table S2). We uploaded voucher photographs in an iNaturalist Project entitled L.A.R.E. Citizen Science Survey of Palmetto Island State Park (https://www.inaturalist.org/projects/l-a-r-e-citizen-science-survey-of-palmetto-island-state-park). We detected all 33 species by the twelfth survey, with no new species in the final 10 surveys. We detected frogs and toads most commonly (62.5% of all detections; 10 species), followed by lizards (29.9% of all detections; four species). The most detected species included Green Frogs (*Lithobates clamitans*), Southern Leopard Frogs (*Lithobates sphenocephalus*), Little Brown Skinks (*Scincella lateralis*), and Green Anoles (*Anolis carolinensis*). Collectively, these four species accounted for 58.8% of all detections during the inventory. Southern Watersnakes (*Nerodia fasciata*) and Western Ribbonsnakes (*Thamnophis proximus*) were the most common snake species detected, with all other snake species having 12 or fewer detections. When surveying the artificial ponds, we often detected American Alligators (*Alligator mississippiensis*). We had relatively few detections of three salamander and five turtle species, with the Small-mouthed Salamander (*Ambystoma texanum*) notable as the only species of greatest conservation need in Louisiana detected in this inventory.

We had a total VES effort of 199.65 person/h, with two to six people searching between 70–360 min depending on the survey date (Supplemental Information Table S1). We had 1,105 detections using VES and this technique detected all 33 herpetofaunal species observed in this inventory (Table 1). Twelve of the 33 species in the inventory were detected only by VES. We detected nine of 10 frog and toad species by their vocalizations during the inventory; only the Southern Leopard Frog was seen but not heard.

Rug, coverboard, carpet, and tin pieces were checked a mean of 4.0, 4.8, 6.0, and 6.5 times each, respectively, during the inventory. We detected three species one time each under carpet pieces, whereas we did not detect any herpetofauna under the rug pieces before decomposition (Supplemental Information Table S2). We detected only three species under coverboards, including seven Little Brown Skink detections. We detected 12 herpetofaunal species under tin, which was the most common type of cover with 28 pieces compared with 16 pieces of carpet, rug, and coverboards combined. Tin was also placed in more areas of the park than other types of cover (Fig. 1). Tin was the only technique besides VES that detected five snake species.

Each ground and tree PVC pipe was checked 9–11 times during the inventory. We detected three herpetofaunal species using this technique: Green Treefrogs (*Hyla cinerea*), Squirrel Treefrogs (*H. squirella*), and Green Anoles (Supplemental Information Table S2). Nine treefrog detections representing both species occurred only in tree-placed pipes and five of six Green Anole detections occurred in tree-placed pipes.

We used dipnetting sparingly in three early surveys concurrent with VES. We captured several Green Frog tadpoles and two Eastern Newts (*Notophthalmus viridescens*) using this technique. We detected Eastern Newts, Green Frog tadpoles, and American Bullfrog (*Lithobates catesbeianus*) tadpoles in minnow traps on both overnight trap dates. We captured a single Pond

Table 1. Summary of amphibian and reptile captures by taxon that were documented in a citizen science herpetofaunal inventory from 2014–2015 of Palmetto Island State Park, Vermilion Parish, Louisiana, USA. Individuals were not marked; therefore, numbers presented represent captures only. A listing by species can be found in Supplemental Information Table S2. Abbreviations are VES = Visual Encounter Survey, AC = artificial cover, PVC = polyvinyl chloride pipes in the ground and on trees, MT = minnow trap, THT = turtle hoop trap, Vocal. = unique incidents of anuran vocalizations.

Taxon	VES	Tin AC	Wood AC	Carpet AC	PVC	Dipnet	MT	THT	Vocal	Total Detections
Anura	495	28	2	1	18	31	68	0	47	690
Caudata	22	1	0	0	0	2	13	0	0	38
Squamata (Lacertilia)	370	23	7	2	6	0	0	0	0	408
Squamata (Serpentes)	157	10	0	0	0	0	0	0	0	167
Testudines	33	0	0	0	0	0	0	1	0	34
Crocodilia	28	0	0	0	0	0	0	1	0	29
Totals	1105	62	9	3	24	33	81	2	47	1366

Slider (*Trachemys scripta*) in the Vermilion River and a juvenile American Alligator in Evangeline Pond. In September 2014, in our single attempt using the active turtle capture technique of deep-water crawfish nets, we were unsuccessful in a 2-h effort using 10 nets baited with melt (beef spleen).

Discussion

We believe our inventory that detected 33 species of amphibian and reptile demonstrated the value of using citizen scientists to conduct surveys and participate in educational outreach. Although the first author was present on most surveys, all of our volunteers had some experience with amphibians and reptiles beforehand, which benefited our inventory. We believe, however, that with a few surveys of mentoring by those more experienced, individuals with no prior background could participate and contribute to such an inventory. Photographs, videos, or sound recordings can be made of those uncertain identifications for later investigation by someone more experienced. This is most feasible for VES as no specialized gear and additional training is needed. In this inventory, VES detected all 33 species and may be costly in time and money for paid staff, but it is ideal for an all-volunteer effort like ours. We used this inventory to educate the public opportunistically during surveys, at events at the park during and since the inventory concluded, through articles in newsletters, on the website of the friends of the park group, and using a pamphlet that can be picked up at the front gate.

Two species of snake not detected during our inventory were known to occur at the park through prior knowledge. A PISP employee showed the first author a photograph of a large Red-bellied Mudsnake (*Farancia abacura*) found within the park prior to our inventory. In addition, the same PISP employee showed the first author a snake shed found in the park before our inventory, undoubtedly belonging to a Speckled Kingsnake (*Lampropeltis holbrookii*). Whereas Red-bellied Mudsnakes are difficult to detect and may be more common than indicated by our efforts, we believe the lack of any Speckled Kingsnakes during our inventory or during a subsequent snake study at the park indicates low abundance, at least in the areas covered by our efforts.

Three herpetofaunal species not detected during the L.A.R.E. inventory were discovered at the park during a subsequent snake study from fall 2015 through spring 2019. A Red-bellied Snake (*Storeria occipitomaculata*) was discovered under a log 19 February 2016, representing the first record from any of the Louisiana coastal parishes (Muse et al. 2016). A Western Dwarf Salamander (*Eurycea paludicola*) was discovered under a log 17 October 2016. Lastly, a deceased Glossy Swampsnake (*Liodytes rigida*) was discovered at a wetland margin 28 February 2018. No other individuals of these three species have been found since. The two species observed before our inventory, and the three observed subsequent to the inventory, bring the herpetofaunal species total at PISP to 38, comprising 14 amphibians and 24 reptiles.

We compared our records to Liner (1954), Dundee and Rossman (1989), VertNet (http://www.vertnet.org), and those compiled by the Louisiana Department of Wildlife and Fisheries for Vermilion Parish (https://www.wlf.louisiana.gov/page/rare-species-and-natural-communities-by-parish), which are based on both literature and museum records and inform the range maps in Boundy and Carr (2017). There are several species that we did not detect in this inventory that likely or possibly occur at PISP based on nearby records and appropriate habitats (Supplemental Information Table S3). We believe the Lesser Siren (*Siren intermedia*), Spiny Softshell (*Apalone spinifera*), and Mississippi Green Watersnake (*Nerodia cyclopion*) are likely residents of the park. The paucity of trapping likely played a role in failing to detect the Lesser Siren and Spiny Softshell. Mississippi Green Watersnakes and Lesser Siren may occupy the marshy swales in the park, which were difficult to access and unsampled in our inventory.

Four anuran species with previous records from Vermilion Parish went undetected in our inventory: Fowler's Toad (*Anaxyrus fowleri*), Greenhouse Frog (*Eleutherodactylus planirostris*), Pig Frog (*Lithobates grylio*), and Cajun Chorus Frog (*Pseudacris fouquettei*; Supplemental Information Table S3). Given our sampling effort and the conspicuous calls of these species, we posit that these species are not current inhabitants of PISP. Several snake species with previous records from Vermilion Parish also were not documented during our surveys (Supplemental Information Table 3). These include the Rough Earthsnake (*Haldea striatula*), Eastern Hog-nosed Snake (*Heterodon platirhinos*), Texas Coralsnake (*Micrurus tener*), and Graham's Crawfish Snake (*Regina grahamii*). Turtle species with previous records from Vermilion Parish that went undetected in our inventory include the Southern Painted Turtle (*Chrysemys dorsalis*), Chicken Turtle (*Deirochelys reticularia*), Alligator Snapping Turtle (*Macrochelys temminckii*), and Eastern Box Turtle (*Terrapene carolina*).

Other non-marine species with previous records from Vermilion Parish come from the coastal area, where brackish water and sandy habitats exist. These include the Six-lined Racerunner (*Aspidoscelis sexlineata*), Slender Glass Lizard (*Ophisaurus attenuatus*), Saltmarsh Snake (*Nerodia clarkii*), and Diamond-backed Terrapin (*Malaclemys terrapin*). These species

were not expected during our inventory because of a lack of suitable habitat at PISP.

Because of non-standard deployment and effort with respect to different detection methodologies, we are unable to make any statements comparing their relative effectiveness. It is worth noting, though, that every species discovered in this study was detected by VES. This contrasts with Hutchens and Deperno (2009) who found only seven of their 33 species using VES; however, because comparing methodologies was their study question, their VES was restricted to 25 randomly distributed 10 × 10 m plots that they visited two times where two individuals searched for 30 min. We did not have such restrictions and looked for herpetofauna for as long as we wanted in whatever habitats we believed gave us our best chances.

An important aspect for us, and for others considering citizen science, is cost. Visual Encounter Surveys and listening for vocalizations do not have a set-up cost and are therefore more likely to be employed by citizen scientists (Hutchens and Deperno 2009). Artificial cover and traps are costly, and we were only able to employ them in this study because of donations solicited for the project. Passive trapping, such as minnow traps and turtle hoop nets, were problematic for us in that we surveyed nearly exclusively on weekends. We were all at least an hour from the park and to use them, we would have to set them on a Saturday and pick them up on a Sunday, which we could not do for most of the inventory.

We are not sure why the two pieces of area rug decomposed within 4 mo, but the carpet pieces showed no decomposition throughout the survey. In any event, we would not recommend area rugs or plywood in such habitats and climates due to rapid decomposition. If the objective is to solely generate a complete species list, our findings suggest that installing and checking PVC pipes in the ground or hung from trees is unlikely to yield any species that cannot otherwise be found through VES and/or vocalization surveys. This may not be the case in all treefrog communities, but we believe it would apply to those in the Eastern U.S.

Palmetto Island State Park and adjacent lands represent the largest contiguous coastal bottomland forest in southwest Louisiana. The park lies at the southern end of the Gulf Coast Prairie only 13 km from Vermilion Bay, with the nearest bottomland forests of comparable or larger size about 40 km north-northeast near the Lafayette Regional Airport and Cypress Island Preserve or 60 km east in the southern Atchafalaya Basin. Therefore, it is an important area for stopover of migratory birds, but also many other inhabitants of bottomland hardwoods, including amphibians and reptiles. Perhaps because of its relative isolation and recent designation as a state park, when the first author was asked to give input on range maps for both the most recent version of the Peterson Field Guide to Reptile and Amphibians of Eastern and Central North America (Powell et al. 2016) as well as The Amphibians and Reptiles of Louisiana (Boundy and Carr 2017), ranges of several amphibians and reptiles had to be extended southward based on knowledge of their occurrence at the park gained in this inventory.

During the inventory, the first author, representing L.A.R.E., wrote several short popular articles in the Palmetto Pal's Paper, the newsletter of the Friends of Palmetto Island State Park, Inc. Articles introduced and gave updates on the inventory, requested donations of materials used in the inventory, and highlighted certain species or groups of species. In spring 2014, during our inventory, L.A.R.E. participated as an exhibitor at the Stir the Pot Seafood Festival and Cook-off at PISP. Several L.A.R.E. volunteers educated event attendees with the aid of 25 species of live native amphibians and reptiles on display. L.A.R.E. has participated in the event every year it has been held since 2014. The Friends of Palmetto Island State Park, Inc. hosts general results of our inventory and selected species descriptions on their website (https://friendsofpalmetto.org/amphibians-%26-reptiles). The highlight of our inventory effort is a full-color brochure, Amphibians & Reptiles of Palmetto Island State Park, replete with information, species lists, and photographs. This outreach product is unique among the Louisiana state park system and can be picked up free of charge at the entrance station.

Despite the stated limitations associated with this L.A.R.E. inventory, the all-volunteer effort produced publicly available data that likely would not have been possible otherwise. This inventory is not meant to be the end point, but rather a baseline for future herpetological inquiries at the park. Future studies could sample areas of the park not sampled in this inventory, particularly the swales in the eastern part of the park, which may harbor species that went undetected in this inventory. A greater focus on aquatic turtle trapping may also discover additional species not detected in this inventory. Citizen science, such as this inventory, is an excellent way to gather important, even if only baseline, data while simultaneously engaging volunteers to be part of the scientific process. The outreach and education during the inventory, at Stir the Pot events, and the free brochure L.A.R.E. produced, is the legacy of our work for many that have visited and will continue to visit PISP.

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Supplemental Information: http://www.herpconbio.org/Volume_17/Issue_1/Glorioso_etal_2022_Suppl.

Brad M. Glorioso (left) founded the Louisiana Amphibian and Reptile Enthusiasts (L.A.R.E.) on Facebook on a whim in May 2012 to find more like-minded individuals in the state and share his passion for educating the public on wild herps on a bigger scale. A complementary website and YouTube Channel soon followed, and the group now has over 6,000 members. L.A.R.E. conducts quarterly field trips and dozens of educational outreach events each year. Brad received his B.S. from Southeastern Louisiana University, Hammond, USA, and his M.S. from Middle Tennessee State University, Murfreesboro, USA, where his thesis focused on population demography and feeding activity of stinkpot turtles. **Philip Vanbergen** (second from left) has been involved with the Louisiana Amphibian and Reptile Enthusiasts (L.A.R.E.) since 2012 and has participated in several surveys, field trips, and outreach events. Additionally, he helped to film and edit a short documentary on the anoles of Louisiana for the L.A.R.E. YouTube channel. Philip received his B.S. in Environmental Science with a concentration in Digital Geography at the University of Louisiana at Lafayette, USA. He is especially interested in citizen science and the applications of Geographic Information Systems for conservation. **Sara Pilgrim** (right) received her B.S. in Biology from Harding University, Searcy, Arkansas, USA, in 2012 and her D.V.M. from Louisiana State University, Baton Rouge, USA, in 2016. She became involved with L.A.R.E. in 2012 while beginning studies in veterinary school. She has had a strong fascination with reptiles and amphibians from early childhood, a passion that grew while studying herpetology under Dr. Mike Plummer and Dr. Nathan Mills at Harding University. She is currently practicing small animal medicine in Central Arkansas, USA, where she primarily sees dogs and cats. But reptiles and amphibians still hold a special place in her heart, and she hopes to find opportunities to continue to be involved in herpetological research such as the citizen science inventory described in this paper. **Beanie Villermin** is also shown. (Photographed by Brad M. Glorioso).