# Scientific Research



### **Elephants**

We're analyzing fecal samples to see how the herd is responding to the introduction of Kosti and how it affects their stress level

### Giraffes

We're looking into if commercial pregnancy detection kits can be used to determine pregnancy in our hoofstock using saliva, blood, or fecal samples.



### **Turantula**

We acquired two species of Brazilian tarantulas from import confiscations this summer and are working on semen collection, storage, and analysis techniques with our new residents.



## Zoo-Museum Alliance

We're leading an effort to connect zoos with natural history museums across the US, since both our organizations are focused on animals and on conservation & education. See the <u>Washington Post article</u> highlighting this initiative!



## Fowler's toads

We're examining hereditary effects of adult stress in amphibians and seeing how it affects the growth, develop, and survival of captive-bred and released tadpoles out at Shelby Forest, where we use soft-release mesh cages so that we can monitor the tadpoles in natural ponds.

# Conservation



## Louisiana Pine Snakes

This year we have released 25 snakes into the wild (300+snakes have been released in total since 2010!), bred 19 pairs naturally, performed artificial insemination on 6 females, and had 46 hatchlings (the largest number in Memphis in one year!). See ZOO VIDEO about LPS Release



## Dusky Gopher Frogs

We've completed 6+ months of field monitoring of our captive-release population down in Mississippi (funded by the AZA Conservation Grant). See ZOO VIDEO about our frog work



#### Rhodes College

 We have students receiving course credit for Academic Internships and Biological Research who are working on endocrine/physiology, science communication, husbandry, and computer science.

### Arkansas State University

 Read the recent ZOO BLOG about Ph.D. student Jen Terry and her work with the turtles in Teton, China, and Herpetarium pond.



# Community



## Spreading the word

We're always happy to talk to people about the research going on at the zoo. In the past few months, we've given talks at: AZA Amphibian Tag, Zoo docent meetings, iDigBio's Digital Data Conference, U of TN Vet Medicine Club, and Swarthmore College's Conservation Biology Class.



# **Upcoming Event!**



## Frog Con (this Saturday)

- Allison Bogisich will be talking about our Amphibian Conservation work to an audience of frog enthusiasts. The talk will be live streamed online and is open to everyone!
  - Time: Sat 10/15 at 9am
  - o Link: here