

CONSERVATION & RESEARCH

>>> NEWLETTER <<<



September 2023



Updates from the summer

Here's what's been going on in the Conservation & Research Department in the last few months. Some people have asked, so I've included a staff structure to further introduce our team. You are more than welcome to reach out to any of us if you want to hear more about our projects or want to get involved.

Cheers,
Sheila (Dr. Sinlan Poo, Curator of Research)

Announcements

The Conservation Action Network (CAN) grant is now opened for 2024! ALL zoo staff are welcomed to apply. More info in email to come.



01/04

Who's who in Conservation & Research (see diagram below)

RESEARCH

Tigers



This 3-legged male tiger inhabited an area with intense poaching pressures (Figel et al. 2023)

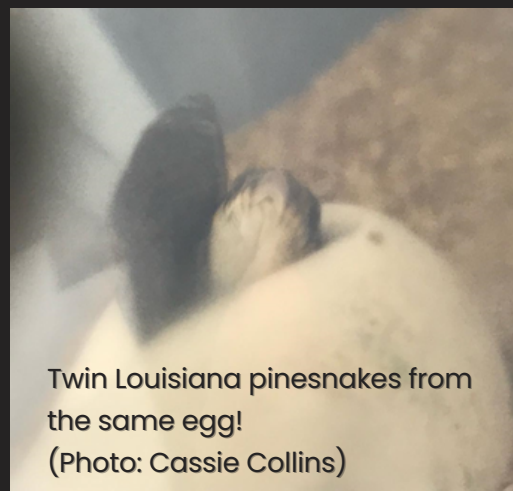
Dr. Joe Figel has set up 60 **camera stations** to survey Sumatran tiger populations in Indonesia. To help reverse hunting-induced declines, the Memphis Zoo is also supporting ranger patrols to monitor Sumatran tiger habitat and clear the forest of snares.

Zoo-Museum Collaboration

We are starting a new collaboration with **Memphis Museum of Science & History** (a.k.a. Pink Palace).



Snakes



Twin Louisiana pinesnakes from the same egg!
(Photo: Cassie Collins)

Beth Roberts, Crista Fennessee, and Research Interns Rebecca Davis & Alex McBride traveled to the Audubon Zoo and **froze sperm samples** from terminally ill snakes.

Dr. Melanie Richter and Rebecca Davis are using **ultrasound** to examine the reproductive physiology of snakes.

Frogs



Dr. Sheila Poo and Research Interns Madelyn Albritton & Jamie Bolan (with help from Vet Tech Jennifer Grimley!) conducted multiple projects comparing toad **parasites & skin microbiome** in **urban (Zoo) vs natural (Shelby Forest)** habitats.

>> **Night at the Zoo:** Washing a toad with sterile water before collecting skin microbiome swabs.



Siamang

Beth Roberts, Crista Fennessee, & Rhodes student Lauren Cordes are working with Melissa Peterson & team to collect and analyze fecal samples, so that we can have more information on **reproduction and health**.

STUDENTS & PUBLICATIONS



>> Summer Research Interns **Jamie Bolan, Rebecca Davis, Madelyn Albritton, & Alex McBride** worked on various projects within amphibians, reptiles, and mammals.

Master's student **Rebecca Davis** (U of Memphis; working with Dr. Melanie Richter) is beginning data collection for her project investigating the role **over-winter temperatures** play on **reproductive development** and readiness in male Louisiana pinesnakes.

Graduate Research

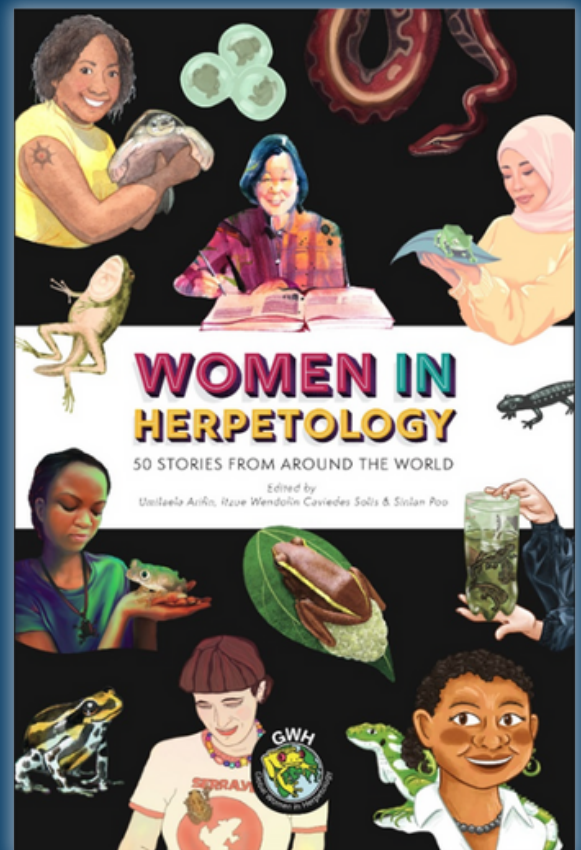


>> PhD student **Jen Terry** (AR State U, working with Dr. Sheila Poo) finished her 2nd year of collecting **demographic & health** data on freshwater **turtles** in China, Teton, and other areas in the zoo.

Publications

- Beth Roberts edited & published in a special issue in ***Theriogenology Wild*** on reproductive health.
- Dr. Joe Figel published a paper in ***Wildlife Letters*** on factors affecting human-tiger conflict.

New Book!



Dr. Sheila Poo published a book called **Women in Herpetology: 50 Stories from Around the World**

The book will support a scholarship for underrepresented students in STEM.

(Click here OR stop by Elephant Trunk to see the book!)

CONS & RES STAFF

LOUISIANA PINESNAKE OPEN HOUSE!



THURS, 10/26, 11AM-2PM

Stop by anytime to get a behind-the-scenes tour, hear more about our work, or see our captive-breeding colony. (We are located behind Rhinos & on chanel 3.)



Dr. Steve Reichling

Director of Conservation & Research



Beth Roberts

Sr. Conservation Biologist



Dr. Sheila Poo

Curator of Research



Dr. Melanie Richter

Research Scientist



Dr. Joe Figel

Post-doc



Jess Cantrell

Resrch Husbandry Mngr



Crista Fennessee

Lab Technician



Mae Staab

Seasonal Keeper



Cassie Collins

Resrch Husbandry Tech

Grants & Funding

- Jess Cantrell – **Phoenix Zoo**: Wild snake diseases.
- Dr. Joe Figel – **Point Defiance Zoo & Aquarium**: Sumatran tigers.
- Beth Roberts – collaborator in Dr. Erin Cury's (Cincinnati Zoo) **IMLS** grant: Bear reproduction.

ROUND-UP FOR CONSERVATION



Thank you to everyone helping to raise conservation funds by asking guests to round-up their purchases!

Reintroductions

The Research Husbandry Team contributed to **wildlife conservation** by rearing and/or releasing endangered Louisiana pinesnakes & dusky gopher frogs.

47
pinesnakes
hatched

1281 frogs
& **1282** tads
released

