

Apr 11th, 8:30 AM - 11:30 AM

Assessing the Current Status and Distribution of Crawfish Frogs in Louisiana

Simon R. Boycott
Louisiana Tech University

Donald B. Shepard
Louisiana Tech University

Julia E. Earl
Louisiana Tech University

Follow this and additional works at: <https://digitalcommons.latech.edu/ans-research-symposium>

Recommended Citation

Boycott, Simon R.; Shepard, Donald B.; and Earl, Julia E., "Assessing the Current Status and Distribution of Crawfish Frogs in Louisiana" (2019). *ANS Research Symposium*. 22.
<https://digitalcommons.latech.edu/ans-research-symposium/2019/poster-presentations/22>

This Event is brought to you for free and open access by the Conferences and Symposia at Louisiana Tech Digital Commons. It has been accepted for inclusion in ANS Research Symposium by an authorized administrator of Louisiana Tech Digital Commons. For more information, please contact digitalcommons@latech.edu.

Assessing the Current Status and Distribution of Crawfish Frogs in Louisiana

Simon R. Boycott¹, Donald B. Shepard², Julia E. Earl²

¹Graduate Student, School of Biological Sciences, Louisiana Tech University

²Assistant Professor, School of Biological Sciences, Louisiana Tech University

One-third of amphibian species globally are experiencing population declines due to habitat alteration, environmental contaminants, UV-B irradiation, disease, introduced species, exploitation, and climate change. The crawfish frog (*Lithobates areolatus*) has disappeared throughout much of its range due to destruction of its habitat, primarily via conversion to agriculture. In Louisiana, most records of crawfish frogs are from prior to the 1970s, and more recently the species has been documented at just one location in Caddo Parish. Our objective is to determine the current status and distribution of crawfish frogs in Louisiana. We are conducting nighttime call surveys along roads near historic locations where potentially suitable habitat still remains. We will also deploy automated audio recording devices (i.e., FrogLoggers) in areas with appropriate breeding habitat in state wildlife management areas and national wildlife refuges. If we locate several crawfish frog populations, we will measure a suite of habitat variables and model occupancy. We will also test for associations between detection and climatic variables such as temperature, humidity, wind speed, and rainfall. Results from this research will be crucial to determine if crawfish frogs persist in Louisiana, and if so, will provide valuable data to inform future habitat conservation and reintroduction efforts.