



# Amphibious

**D**roughts, industrialization, and pollution are factors that affect every living organism in one way or another. Researchers have devoted much time and effort to study the impact these factors have on whales, sea turtles, deer, and many other “majestic” creatures. However, very few have taken the time to research the little guys in the animal kingdom. Jessica Kissner is one of such that has.

Within the Department of Natural Resources, various studies are constantly in progress. Some study viticulture, some study wind energy, and some study soil. Jessica Kissner and Rasika Ramesh, however, study amphibians the only species that spends half its life breathing water, the second half air.

Jessica Kissner, a graduate student from Iowa City, Iowa, is focusing on various affects that influence species richness in the playa lakes of New Mexico. Some of the variables that Kissner is testing include the influence of pH and temperature on the growth and development of various species.

Kissner said there are surprisingly very few studies that have been conducted on amphibians, specifically those that exist in the southwestern United States. She said she believes with climates changing, it is imperative to know what effects the development and reproduction of amphibians. She says there are always difficulties that present themselves when working in the field.

“Weather can be a setback,” Kissner said, “especially in the Southwest where amphibians burrow themselves underground and only come out when it rains.”

Kissner said much of her time is revolved around following the weather forecasts, and being

ready to drop everything and head to the field at any chance of rain is key.

Rasika Ramesh, a graduate student from Kerala, India, has traveled across continents to study amphibians on the South Plains. She said she her interest in wildlife conservation began while she was still a student in India. She said began helping the local villages in an effort to preserve turtle nests of a species that had become endangered.

Ramesh’s research is unique in the sense that her research deals primarily with amphibian species that exist in urban settings. Her research is conducted primarily within Lubbock’s lakes within Loop 289. The purpose of her research is to understand how development and industrialization affects the various amphibious species.

Ramesh said she has found numerous species that exist within the Lubbock city limits that include: Texas Toads, Bullfrogs, Spotted-Chorus Frogs, Great Plains Narrow-Mouthed Toads, and Plains Spadefoot. She said her research is new to the field in the sense that most studies are related to rural areas and groundbreaking research is important to Texas Tech.

“Amphibians are important to us,” Ramesh said. “They live two lives; an aquatic one and a terrestrial one. No other species are like that and we need to preserve them.”

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