Professor Bateman explores the relationship between habitat heterogeneity and wildlife diversity using examples from three Southwestern riparian systems. Riparian vegetation, habitat structure, microclimate, and reptile and amphibian communities were measured from the Middle Rio Grande (New Mexico), the Virgin River (Nevada), and the San Pedro (Arizona). Bateman will explain how changes in vegetation and changes in the thermal quality of habitat can explain lizard assemblages. Predictive models of these Southwest systems linked vegetation-soils-habitat structure to herpetofauna, whereas temperature during summer and spring were good predictors of hatchling (young-of-the-year) lizards.

Native riparian vegetation could serve as an oasis to buffer temperature extremes and periods of low precipitation. This research has implications for climate change by identifying the vulnerability of some wildlife species sensitive to temperature increases.

Heather Bateman is a field ecologist and conservation biologist interested in how human land-use affects vertebrate populations and habitats.

Her research interests lie in exploring population responses to habitat alteration, with a particular interest in invasive plants and the effects on amphibians, reptiles, and birds.

Dr. Bateman will report on her sabbatical, during which she had the chance to serve as a visiting scholar at the Natural Resource Research Center in Fort Collins, Colo.