

## **Assessing important habitat types through species distributions and land use type of the marbled salamander (*Ambystoma opacum*)**

Sarah Clerkin (sbc2256) - [sarah.clerkin@utexas.edu](mailto:sarah.clerkin@utexas.edu)  
Kyle Jesse Moxley (km52455) - [kmoxley@utexas.edu](mailto:kmoxley@utexas.edu)

**Abstract:** The United States has the highest salamander diversity of anywhere in the world, making US conservation efforts particularly important for the preservation of the order. The marbled salamander (*Ambystoma opacum*) can be found in a variety of different habitats across the eastern United States. With an aquatic larval stage and permeable skin, these animals are sensitive to pollution and land use change and are used as indicator species to show habitat health for other aquatic and terrestrial species. We mapped *A. opacum* occurrence with land use type across the salamander's range to understand where the species could be found and what land use types were found in those areas. We found deciduous forest and woody wetlands were the two most common land use types where salamanders occurred, indicating these are the preferred habitat of the species. We also found that a significant portion of *A. opacum*'s range is in developed land, highlighting the importance of preserving forest and wetland areas the salamanders prefer.