

# BELLE FOREST CAVE STUDENT RESEARCH



Left to Right: Caroline Glover, Dylan Adler, and Kylie Lawrence

**S**ince 2015, Belmont University Biology students have undertaken habitat research at TennGreen's Belle Forest Cave in Bellevue, Tennessee. Under the supervision of Dr. Darlene Panvini, 30 students have investigated a variety of ecological topics including species distribution patterns, earthworm relationships to leaf decomposition, exotic and native plant decomposition rates, and insect and arthropod relationships to exotic and native plants.

Two of Dr. Panvini's most recent students, Anna Anderson and Gary Noel, received honors for their work at the Belle Forest Cave. Anna won first place in the Ecology, Botany, and Zoology section at Middle Tennessee Collegiate Division of the Tennessee Academy of Science Annual Meeting in April 2017 for her work on decomposition rates of sugar maple and bush honeysuckle in mixed litter bags. Gary won first place in the Ecology and Environmental Science section at the Tennessee Academy of Science Annual Meeting in November 2016 for his poster on the effects of fertilizer on decomposition of native and invasive exotic plant species.

"The Belle Forest Cave site provides a unique and convenient opportunity for students to learn how to be scientists and to engage in the practice of doing science. Students in my Ecology course visit the site and conduct mini-projects where they develop a question and experiment, collect and analyze data, and present their work in class. This experience provides the framework and background for the more extensive projects they will complete as seniors. Some of our seniors have chosen to complete their research at the Belle Forest Cave site. Currently, two students are working there to compare the occurrence of bees and insects in areas that are invaded by exotic plants to areas that are primarily native species. This work will be presented at regional conferences and often stimulates students to consider scientific research as a career. Additionally, students are amazed at the beauty of the Belle Forest Cave site and enjoy the chance to be outdoors exploring nature." — Dr. Panvini



Left Counterclockwise to Right: Mariah Boes, Mallory Arstikaitis, Tori Hongo, and Sam Rodriguez