

# Joseph Manthey, Biology & Genetics

---

**University:** University of Wisconsin - Madison

**Year in School:** Senior

**Hometown:** Fond du Lac, Wisconsin

**Faculty Mentor:** Dr. Paul Porneluzi, Central Methodist University

**Funding Source:** Missouri Ozark Forest Ecosystem Project

## **Variation in mushroom frequency on coarse-woody debris in areas of different forest management techniques**

*Joseph Manthey, Mathew Wilson, and Paul Porneluzi*

Different forest management techniques may have serious varying ecological consequences. Our focus was on the mushrooming bodies of fungus on coarse-woody debris in three differently managed areas of forest. This is an important aspect of the forest ecosystem as fungi are essential to the forest in decomposing organic matter in nutrient cycling and exchange processes. Our study took place in the Current River Conservation Area in Reynolds and Shannon Counties in Missouri. We sampled twenty sites each on three different forest management areas (even-aged treatment, uneven-aged treatment and no harvest) measuring the frequency that mushrooms occurred on differing sizes of coarse-woody debris. Analysis may show the effects of different management types on fungal growth.