Elizabeth O'Hara, Biological Sciences

University: University of Missouri
Year in School: Senior
Hometown: Chicago, Illinois
Faculty Mentor: Dr. Paul Porneluzi, Central Methodist University
Funding Source: Missouri Ozark Forest Ecosystem Project

Effects of even-aged timber harvest on herbaceous vegetation richness in southern Missouri forests

Elizabeth O'Hara, Brian Weiss, Hayley Stafford, and Paul Porneluzi

For centuries American forests have been exploited for timber and other commodities, often with unforeseen long-term detrimental effects. As areas are cleared, the natural diversity of the forest is altered. Development of ecologically sustainable management practices is essential. Initiated in 1989, the Missouri Ozark Forest Ecosystem Project (MOFEP) is a landscape experiment designed to examine forest management impacts on multiple ecosystem attributes for large sites. In the summer of 2008, we investigated the impacts of previous clearcuts on the species richness of herbaceous and woody plants in the southeast Missouri Ozarks, within the MOFEP study sites. We determined species richness within 1-m2 representative plots randomly chosen throughout each of three even-aged management sites and one no harvest control site. We hope to better understand the effects of clearcutting on forest herbaceous plant diversity by comparing the species richness on harvested sites with that on no-harvest sites.