

## Evaluation of Aboveground Weed Biomass on a Midwestern Green Roof

R. Krutsinger, B. Greeling, V. Jost, K. Lockett, S. Morgan, and W. Retzlaff

The study of green roof systems in the Midwestern region has focused extensively on determining the plant species most suitable for growth in rooftop conditions. The project goal for this study is to identify the biomass of weed species that are found on a green roof after it is installed. A 16,000 ft<sup>2</sup> green roof was established on the Student Success Center at Southern Illinois University Edwardsville. The green roof was planted April of 2009 with 5 *Sedum* species and installed in August 2009. Three replicate test plots were selected in different rooftop locations – an east roof edge, a west roof edge, and a center plot. Each plot consists of four sections of ten Green Roof Blocks™ each based on their clipping cycle; in one section all weeds (non- *Sedum* species) are clipped every two weeks, in the second all weeds are clipped every four weeks, in the third all weeds are clipped every six weeks, and the fourth section is left unclipped. The aboveground biomass of each non- *Sedum* species found in each section was determined and the total aboveground biomass found in all sections was evaluated for the period October 2<sup>nd</sup> thru December 18<sup>th</sup>, 2009. For this growth period, aboveground biomass in the 2, 4, and 6 week clipping-plots were not different. The total aboveground biomass clipped during this period was 137.73 grams. We will continue to follow this project to determine if weed invasiveness impacts the establishment (roof coverage) of a green roof.