Kansas State University

Evaluation of the Performance of the Memorial Stadium Green Infrastructure

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INTRODUCTION

comes food, shelter for animals and microorganisms,

Size Limits of USDA Soil Separates

Weight

The weight restrictions of a desired location for a green roof can alone be the deciding factor for

the benefits of a healthy microbial community in gr

Soil microbial community is closely linked to plant communities through complex interactions. A review by notorious soil microbiologists, Gupta and Germida explains, “Plants affect the soil microbial community through biomass production, lit

New methods are being developed that allow us to harvest energy produced through microbe and plant interactions. Plant-Microbial fuel cells (PMFC) are a method under development and are of

The green roof implemented at Kansas State University's Memorial stadium is intended to be a staple of the Konza prairie on the KSU campus, housing native tall grasses and prairie shrubs. However, the media selected is primarily sand, reportedly >60% according to Turf and Soils Diagnostics (Sharp, 2015). It is also only 4-6 inches deep in most areas in addition to the dead organic matter being removed annually. All of which, as indicated by this review, may have

Runoff Quantity

The quantity of runoff from a green roof can be analyzed in terms of detention and retention. Per

Figure 5. Runoff hydrographs of selected representative (A)

“First flush” phenomena

performance is also impaired with depression which

setting, and then a week later through an urban set

recoup from a stressful day, and/or can refocus for their next class or assignment. The benefits that people can receive from the GI are incredible and should not be overlooked.

The benefits of GI can have a huge impact on the students and faculty here at Kansas State

Figure 7.

important finding because of how difficult it is to physically measure ET rates. The equation used is:

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