



MISSISSIPPI STATE
UNIVERSITY™

EXTENSION SERVICE

Johnson Residence

Jackson, MS

Project Highlights:

- Small green roof in shaded condition.
- Compost bins and forest soil restoration.
- Woodland understory restoration.
- Walking pathways through the woodland understory.

Green roof



Green roof on outdoor pavilion

Project designers:

Robert Poore, Native Habitats,
landscape architect

Context: residential

Project Overview

This small pavilion is set in the middle of a restored woodland outside of Jackson, Mississippi. The woodland was originally filled with a dense understory of invasive exotic species before these were removed and replaced with native species. Compost bins were established to provide a layer of organic matter throughout the woodland understory. This green roof functions as a garden for the structure, while other green roofs can function to reduce heating and cooling loads on buildings, reduce stormwater runoff, filter pollutants from the air, and insulate buildings.

Smart landscape features and practices

Soil rebuilding. Preserving or restoring soil health is important to the success of any garden. For this garden, large compost bins were constructed to generate large volumes of decomposed organic matter. After curing, the compost was added to much of the woodland understory in order to establish the shrubs and groundcovers. Compost also retains a large amount of moisture, making it available to plants during dry periods.

Greenroof. To complement the woodland pavilion, a small green roof was added just above the entry. This is an extensive green roof, which means it has a shallow planting depth and can support less than 25 pounds of vegetation per square foot. The green roof was planted with ferns, rain lilies, and other native shady woodland groundcovers.

Written by Robert F. Brzuszek, Associate Extension Professor, The Department of Landscape Architecture, Mississippi State University. Photo was taken by Robert F. Brzuszek.