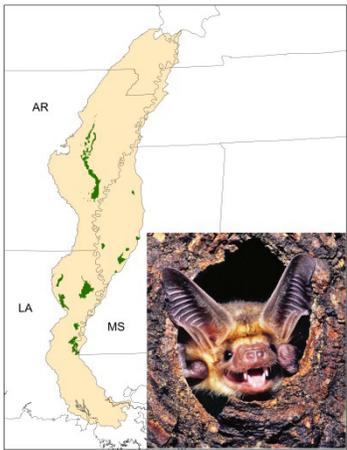


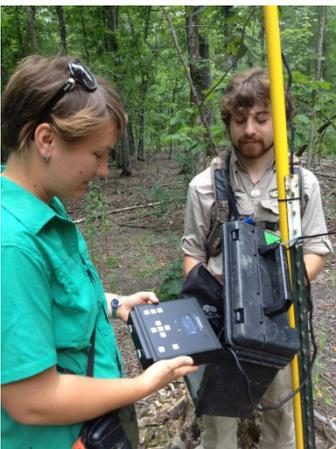
# Bats in Forests Managed for Wildlife



**The Challenge:** Within the Mississippi Alluvial Valley (MAV), forest managers often prescribe variable retention silvicultural treatments within bottomland hardwood forests on public lands to improve forest conditions (i.e., structural heterogeneity, species composition, and senescence) for priority wildlife species. Even so, the effect of variable retention harvests on the occurrence of bats is uncertain. In particular, concerns have been voiced regarding loss of potential roost cavities if hollow trees are harvested.



**The Science:** We are conducting an assessment of bat occurrence within bottomland forests on National Wildlife Refuges, and other public conservation lands in the MAV. The occurrence, and relative abundance, of bat species within forest stands after prescribed harvests to improve habitat for wildlife, and stands not subjected to harvest, is being identified through use of acoustical bat detectors. An index of flying nocturnal insects (the prey of many bat species) is concurrently being assessed. Because habitat conditions change over time after harvest, bat surveys are taking place in stands from 1 to 10 years after harvest.



**The Future:** We will use indices of bat and nocturnal insect abundance to relate their occurrence in managed forest stands relative to years after variable retention harvest. We will evaluate the relationship between forest habitat structure and indices of abundances for bats and insects. Through these efforts, we hope to develop a region-wide understanding of the effects on bats resulting from silvicultural treatments prescribed and implemented to improve forest habitat for wildlife in bottomland hardwood forests.