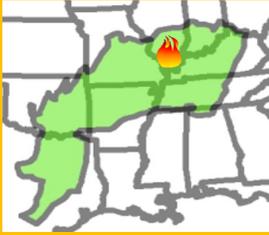


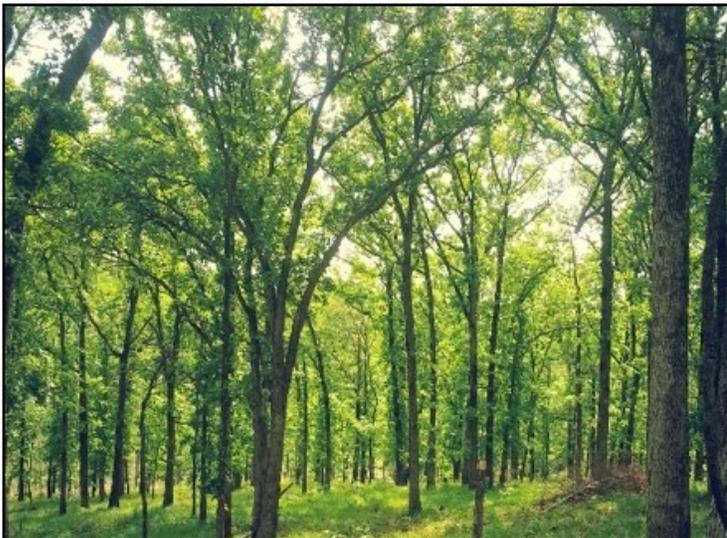
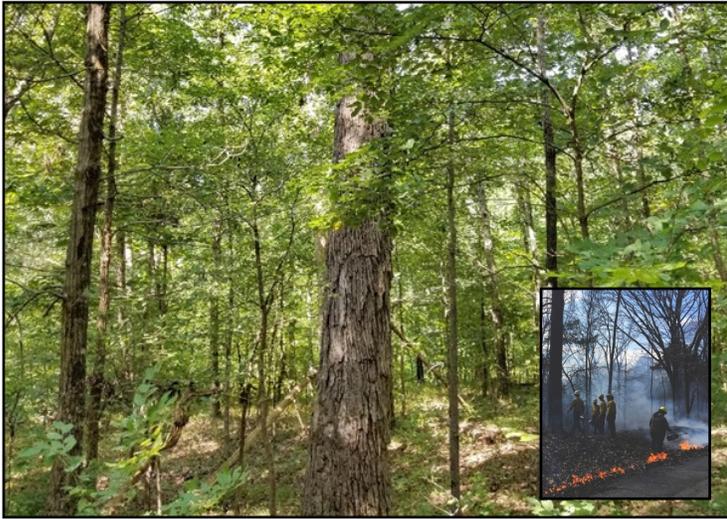
# Touch of Nature Environmental Center, Southern Illinois University

## FIRE SCIENCE HOT SPOTS



In this feature, we bring into focus fire science on-the-ground

Located in the Shawnee Hills region of southern Illinois, the approximately 3400-acre [Touch of Nature Environmental Center](#) was established in the early 1950s when Southern Illinois University (SIU) purchased abandoned agriculture lands surrounding Little Grassy Reservoir. Like many forests in the eastern US, natural communities here are challenged by an increasingly dense and mesophytic forest midstory (top-left panel) due to fire-exclusion practices. This condition reduces light levels, leading to oak and hickory regeneration failures, and reduced herbaceous plant volume and diversity. Watch this [VIDEO](#) to learn more about this and southern Illinois' 'Let the Sun Shine In' program. Prescribed burning (top-right, insets) and other management practices, including timber stand improvement cuttings and herbicide applications for non-native plant control, have led to increased light conditions, herbaceous plant cover, and oak/hickory regeneration success (lower-left). Additionally, this management and site have provided opportunities for research on a wide variety of topics, including fire and its association with apiculture, botany, pest ecology (think ticks), meso-carnivore interactions, and whitetail deer forage.



Since 2001, the Saluki Fire Dawgs (SIU student-based wildland fire crew), have been training for and conducting prescribed burns to augment oak woodland and prairie restoration at SIU's Touch of Nature Environmental Center. Recently, investigators have identified several populations of the very rare and fire-dependent species of conservation concern, buffalo clover (*Trifolium reflexum*, bottom-right panel), all of which were located within prescribed burn units on the property during post-burn monitoring. Other

common prairie-savanna plants include big and little bluestem grasses, penstemon, various coneflowers and milkweeds, cardinal flower, and butterfly weed. Click on each photo for a full-size downloadable image, or view all [HERE](#). Photo credits - buffalo clover, Isaiah Tanner; upper-left panel inset, Brian Walsh; all others, Charles Ruffner.

