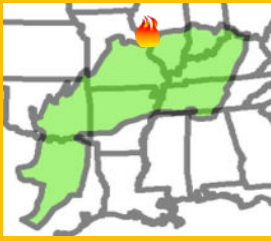


Pere Marquette State Park

FIRE SCIENCE HOT SPOTS



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

[Pere Marquette State Park](#) encompasses approximately 8,600 acres along the eastern bank of the Illinois River in southwest Illinois. Established in 1931, it is the largest state park in Illinois and is renowned for its dramatic bluffs and expansive woodlands, making it a hallmark of the River Hills ecoregion. The landscape is dominated by upland woodlands and forests, but its varied topography and geology support a wide array of ecosystems, including hill prairies, glades, limestone cliffs, and caves. Within the park, there is a notable difference between the vegetative communities on east- and west-facing slopes. East-facing slopes are more mesic, supporting denser forest communities (see **bottom-right inset** image below), while the drier conditions on west-facing slopes encourage more open, fire-prone woodland vegetation. Beginning in the 1970s, the Illinois Department of Natural Resources (IDNR) began implementing prescribed burns on west-facing upper hillslopes to restore and maintain existing hill prairies (see **bottom-right** image below). In the 1990s, efforts expanded to include fire treatments in wooded areas bordering these established hill prairies and glades. These actions not only promote biodiversity but also enhance recreational values by improving the aesthetic quality of hiking trails, scenic overlooks, and wildlife viewing and hunting areas, ultimately enriching the experience for over 500,000 annual visitors.



Top-left: Overlooking the Illinois River, this hill prairie, situated high on a west-facing hillslope, is managed using frequent fire (every 1-3 years). The resulting mosaic of habitats supports species of conservation concern, including the timber rattlesnake (*Crotalus horridus*) the eastern whip-poor-will (*Antrostomus vociferus*) and prairie ladies' tresses orchid (*Spiranthes magnicamporum*). **Top-right:** The slender glass lizard (*Ophisaurus attenuatus*) is listed as a "Species in Greatest Need of Conservation" under the Illinois Wildlife Action Plan. Prescribed burns play a critical role in preserving the open, grassy habitats these lizards require. **Bottom-left:** IDNR manages many wooded areas on south-facing slopes through a combination of regular

burns, invasive plant species removal, and selective tree thinning, which enhances foraging habitat for the Indiana bat (*Myotis sodalis*), a state-listed species in Illinois. **Bottom-left inset:** Existing structures and recreational resources located within prescribed fire units offer additional challenges for fire crews. Click on each photo for a full-size downloadable image, or view all [HERE](#). Photo credits: top-right by Mark Phipps (IDNR), bottom-left, bottom-right, and bottom-left inset by Hillary Thompson (National Great Rivers Research and Education Center), all other by Oak Woodlands & Forests Fire Consortium.

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