



LaRue-Pine Hills is one of the most unique areas in the world. As with many places in the Shawnee National Forest, the beauty we see today is rooted in geologic history. The geology of LaRue-Pine Hills took millions of years to form its bedrock before nature's erosive forces took over and created the 150-foot limestone bluffs that now rise out of the Mississippi floodplain.



These massive bluffs extending roughly 5 miles near State Route 3 are as impressive today as they were to explorers Lewis and Clark in 1803. While traveling up the Mississippi River, Captain Merriwether Lewis writes in his journal. *"Novr. 22ed 1803 ...but here putts in some high cliffs the summits of which are crowned with pitch-pine & seeder, these rocks are nearly perpendicular in many places sixty feet , and the height of the hills appear about to be about 120 feet above the banks which forms their base..."*

LaRue-Pine Hills' unique physical characteristics dictate and support a rich biodiversity not found anywhere else in the country. In all, the area covers about 4.5 square miles (3547 acres) and contains 14 natural communities including forests, wetland, prairie, glade and barren ecosystems and geologic features. Please help protect this special place for future generations to enjoy, study and appreciate.

## The Research Natural Area

LaRue-Pine Hills/Otter Pond became our nation's 205<sup>th</sup> Research Natural Area (RNA) in 1991. RNAs are permanently protected to maintain biological diversity and to provide places for research and monitoring of natural communities. This RNA is 2,811 acres and includes LaRue Swamp, the Pine Hills (named for the stands of native shortleaf pines on the bluffs), Winters Pond and Otter Pond. More than 1350 species of plants and animals make their homes in the LaRue-Pine Hills/Otter Pond RNA. Many are threatened and endangered species. The RNA has tremendous diversity; prairie plants, southern swamp types and plants typical of the eastern and western forests can all be found. About 66% of the amphibians, 59% of the reptiles, 35% of the plant species, and 90% of mammal species known to occur in Illinois are found in the RNA. It is one of only two sites in the state where the native shortleaf pine grows naturally.



Red Milk Snake

**Remember that collecting plants and animals is prohibited without a permit.**

## Geology of LaRue-Pine Hills

The geologic story of LaRue-Pine Hills begins millions of years ago when most of Illinois was a large inland sea known as the Illinois Basin. Over time the sandy shores of this sea became the sandstone rock formations one sees throughout southern Illinois. The deepest portion of the sea became the towering limestone bluffs at LaRue-Pine Hills. The rocks that make up the bluffs at LaRue-Pine Hills are Devonian age Bailey Limestone (about 408 million years old). Limestone is composed of lime (precipitated calcium carbonate) from the shells of dead sea-animals (e.g., sea shells, coral, etc.). Over millions of years these layers of shell deposits were pressed into rock. Once the sea receded, this bedrock was exposed to nature's erosive forces. Wind and water began to wear away the rock creating ridges and gullies, carving out the beautiful limestone rock formations of LaRue-Pine Hills.

### LaRue-Pine Hills/Otter Pond Research Natural Area Regulations

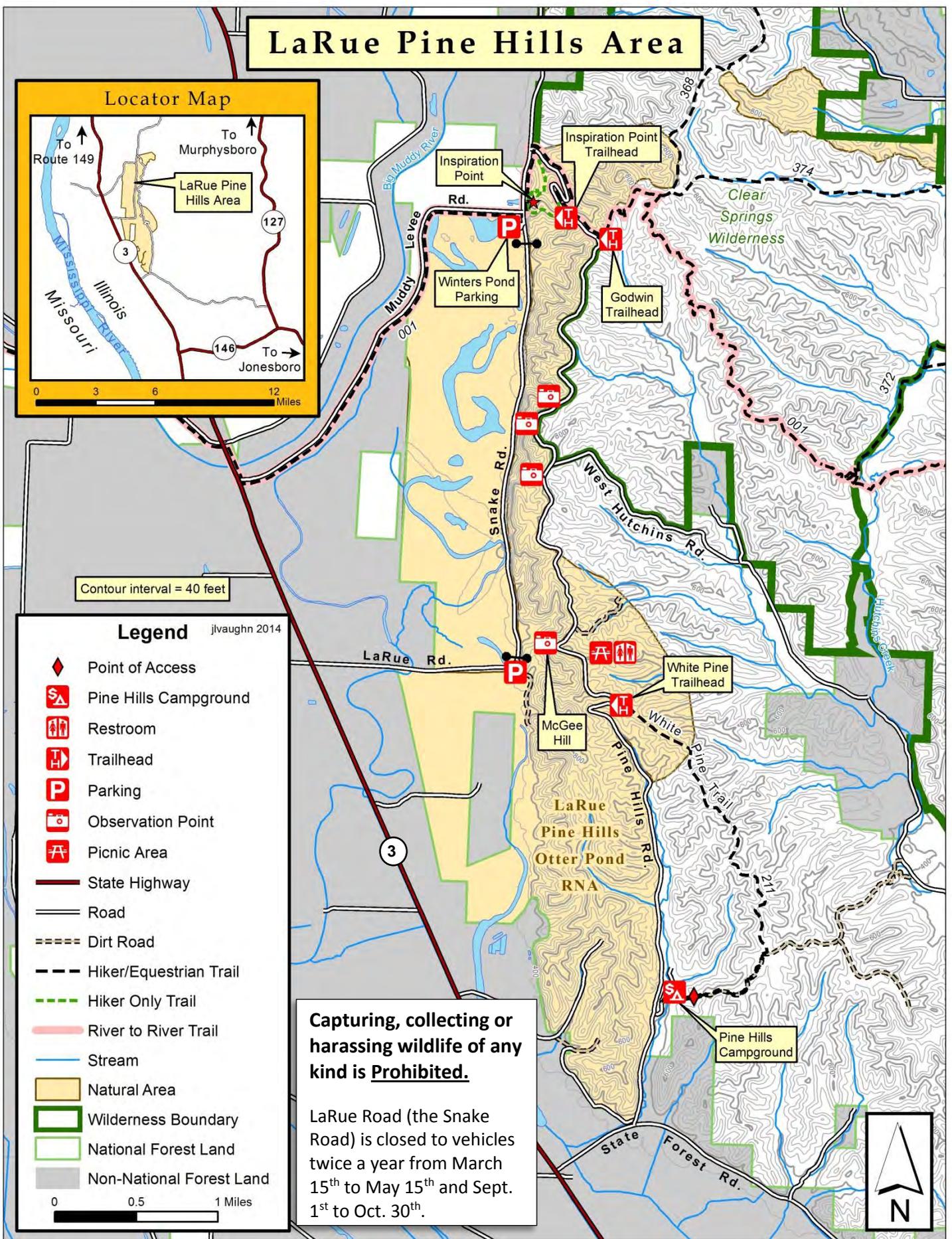
This Research Natural Area has been established to protect a number of special plants, animals and natural community types. To help meet these objectives the following restrictions apply to public use and occupancy of the area.

#### **The following is prohibited:**

- Collection, handling or removal of any snake species. This includes gathering, herding, harassing or having in possession. Also to have in your possession collecting equipment (unless authorized).
- The use of horses except on Forest Road 345.
- Overnight camping.
- Building, maintaining, attending or using a campfire (gas stoves are allowed).
- Excavation, disturbance or removal of any soil, stone, or material lying upon or contained in the rock or soil of the area.
- Cutting, killing, destroying, injuring or removing living vegetation.
- Taking or killing of any animal, bird, fish, reptile or amphibian, except for game species as defined and permitted by Illinois state laws.
- Conducting certain activities such as, research projects, tours, group visits, etc. which the Forest Service has not approved in writing.\*
- To possess or use motorized or non-motorized vehicles and cycles off-road.
- Using a gas-powered motorized watercraft (electric trolling motors are allowed).
- Rappelling or rock climbing.
- Abandonment of garbage brought to the LaRue-Pine Hills RNA.
- Establishment of commercial enterprise, construction of any improvements, establishment of permanent or semi-permanent camps or erection of structures. Temporary waterfowl blinds are permitted, but must be removed at the end of each hunting day.

\*For more information about obtaining a Research Natural Area Use Application contact the Shawnee National Forest's RNA Coordinator at (618) 658-2111. Some activities may require a separate special-use permit.

# LaRue Pine Hills Area



**Access:** From Jonesboro: Take Highway 146 west 8 miles to Highway 3, then north 8 miles on Hwy 3 to Muddy Levee Road. Turn east (right) onto Muddy Levee Rd. and go 3 miles to LaRue Rd. where the road T's. Here, turn right for Winters Pond parking area and the 'Snake Road' or turn left and proceed 0.6 miles to Pine Hills Road. At this point you are at the north end of the RNA.

From Murphysboro: Take Highway 149 west 7 miles to Highway 3; then south 13.6 miles on Hwy 3 to Muddy Levee Road. Turn east (left) onto Muddy Levee Rd. and go 3 miles to LaRue Rd. where the road T's. Here, turn right for Winters Pond parking area and the 'Snake Road' or turn left and proceed 0.6 miles to Pine Hills Road. At this point you are at the north end of the RNA.

**Facilities:** Parking lot at Winters Pond will accommodate about 12 vehicles and parking area at south gate, about 3 vehicles.

**Safety:** Use caution when hiking trails on top of the bluffs. Ticks, chiggers and poison ivy are prevalent, especially during summer months, so take the proper precautions. Venomous snakes exist in the RNA, avoid being bitten by slowly moving away if you encounter any snake.

**Specific Site Regulations apply, refer to the frontside of this publication.**

## For More Information

Mississippi Bluffs Ranger District  
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Jonesboro, IL 62952  
(618) 833-8576  
[www.fs.usda.gov/shawnee](http://www.fs.usda.gov/shawnee)

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