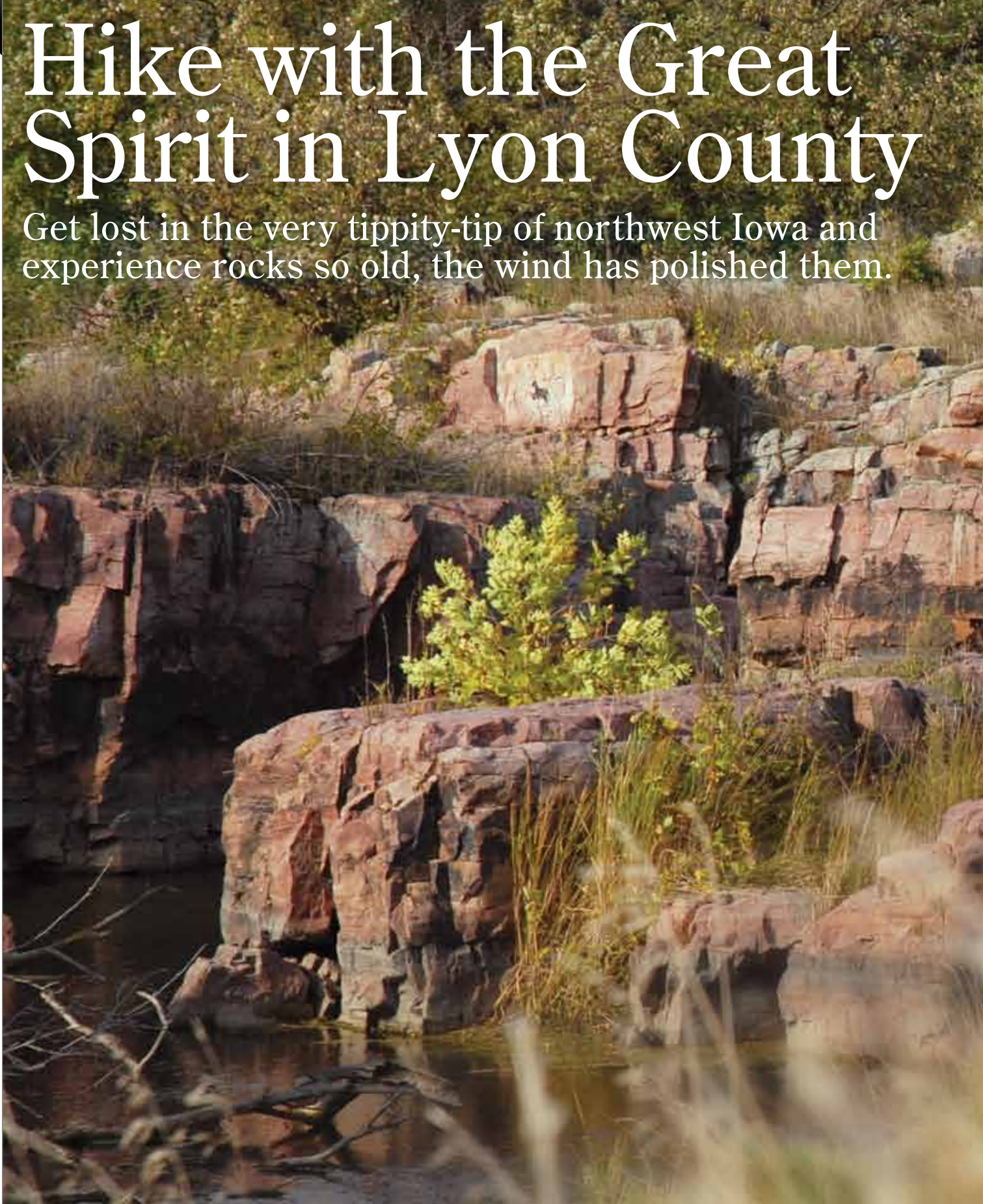


# Hike with the Great Spirit in Lyon County

Get lost in the very tippity-tip of northwest Iowa and experience rocks so old, the wind has polished them.





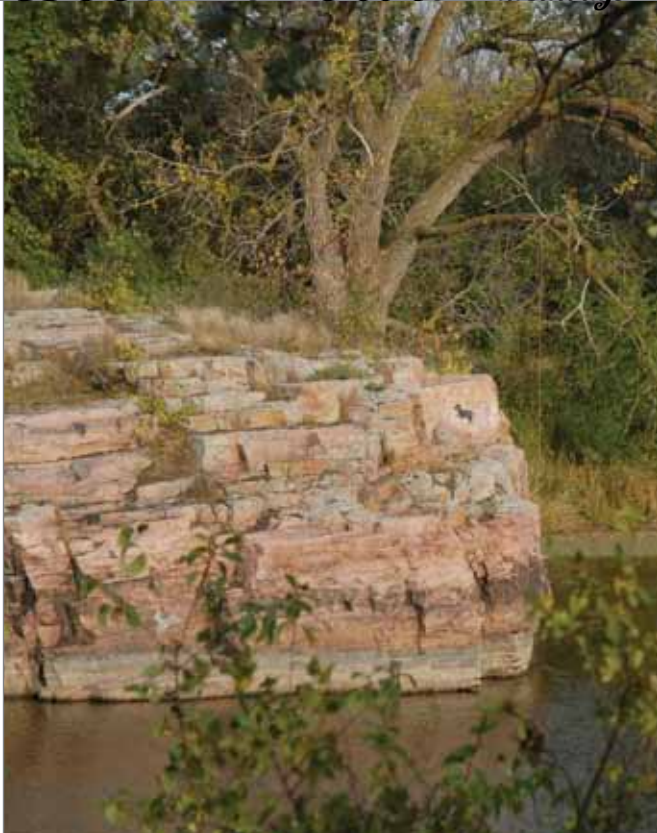
**I**f rocks normally don't get you too excited, they will at Gitchie Manitou State Preserve—about the most remote place in Iowa where it looks like you'll fall off the map. (Have no fear, civilization is nearby in Sioux Falls, S.D.)

#### **ELDER ROCK**

Pink quartzite outcrops are the thing to see here. They give the place a way different look than the rest of Iowa

and for good reason. These rocks are 1.6 billion years of age, the oldest exposed rock in the state—three times riper than the next oldest found in eastern Iowa, says Ray Anderson with the DNR geological survey bureau.

Early geologists pondered these unusual rocks and thought they had slowly been lifted above the surface. It's now known that all the other layers that once hid this formation eroded away hundreds of thousands of years ago, leaving this knob of battleship-hard rock.



“This Sioux quartzite is one tough rock, resistant to weathering,” says Anderson. It didn’t yield to a half-dozen continental glaciers. Its sand grains are so tightly cemented together by silicon dioxide that they are non-porous and don’t break apart in freeze and thaw cycles like other rocks. It doesn’t erode and isn’t affected by pollution. The time-worn rocks have been exposed so long they’re polished *by the wind*.

“That’s another thing that is pretty cool,” says Anderson of the process known as ventification. Basically little wind-blown particles of dust slowly sandblasted a smooth polish on the rock, the effect of sitting outside for several hundred thousand years.

Because the pink to reddish rock is so tough, it continues to be widely quarried in adjacent South Dakota and Minnesota for concrete. “A lot of roads in the region have a pinkish cast to them,” says Anderson.

Eons earlier the rock was used by 55-foot sea lizards. Chunks of it were found 400 miles away in western Kansas with the remains of a monasaur, an air-breathing, ferocious marine predator that lived when the area was an ancient inland sea. The quartzite rocks were gobbled up as gizzard stones to help grind up and digest its prey.

That type of local history makes for something to think about when sitting on the rocks and pondering geologic time.

From 1890 to 1920, the land here was quarried, resulting in Jasper Pool. The preserve was established shortly afterward to protect the rock from ending up as paving material.

## PRAIRIE GLORY

Gitchie Manitou, a 91-acre preserve with a Sioux name meaning “Great Spirit” or “Great Force of Nature,” contains prairie with more than 130 plant species and 17 conical mounds that dot the southern portion of the preserve. Porcupine grass, prairie dropseed, big and little bluestem and leadplant can be found along with species rare this far east, such as blue grama, buffalograss, fameflower and western cliff fern. Among the rocks, look for Whitlow grass, tumblegrass and rock spikemoss.

In the 1880s, stagecoaches en route to Sioux Falls crossed the Big Sioux River, which forms the state line. The river, prairie and floodplain plant communities make for diverse birdwatching.

“If I had to escape from civilization, this is where I’d do it,” says Rob McManus, who lives near the Twin Cities but plays a week or two each month for the South Dakota Symphony. “I’ve been going there five years,” says the prairie enthusiast. “The trail loops make for easy walks in an afternoon before rehearsal.”

In the 1930s, the Civilian Conservation Corps built a stone shelter, now in ruins. “The ruined shelter is really interesting. There are springs popping out of the shelter back wall, which is built into the rock. It drips and makes a cool place on a sunny day,” says McManus.

It’s the driest area of the state, so look among rock outcrops for brittle cactus and sand cherry.

“There is an air of mystery about the place,” says McManus. 🐾

**TRAVEL TIPS**

Restaurants, lodging and camping are in nearby Sioux Falls, S.D. Or stay at Lake Pahoja in Lyon County with efficiency cabins, large campground, fishing and a swimming beach all managed by the Lyon County Conservation Board ([712-472-2217](tel:712-472-2217); [www.lyoncountyiowa.com](http://www.lyoncountyiowa.com)).

