

LIZARD CREEK WATER TRAIL



WEBSTER COUNTY

LIZARD CREEK - FAST WATER AND INDUSTRY

This water trail follows the North Fork Lizard Creek flowing from northwest to the southeast ending at the Des Moines River in the City of Fort Dodge. This beautiful water trail is not for beginners. The presence of large rocks and fast-flowing water can prove somewhat challenging for paddlers.

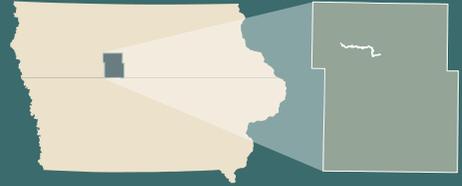
The winding water trail features wildlife above and below the water. Clusters of holes can be seen dotting the high sandstone bluffs where bank swallows make their nests. The high bluffs surrounding the creek served as camp sites for prehistoric Native Americans and historic tribes.



Photo by Jay McGowan

Lizard Creek is a “non-meandered” stream in Iowa law. That means that the State of Iowa owns the water flowing through it, but not the land adjacent to it or under it. That’s all private land. Please respect it and don’t trespass. Even though you can’t get out or camp along this beautiful stream, there’s plenty to see along the way!

Paddlers need to be aware that stream reaches outside the designated Water Trail are not signed from the river (gray areas on map).



In addition, electric fences spanning the width of the river may sometimes be encountered



Bank swallows make nests in soft sandstone

Bank swallows of both sexes dig clusters of tunnels up to several feet deep in vertical banks and soft stone bluffs. The small-sized swallows fly low over water with quick, fluttery wingbeats, catching insects in the air.



Red oak leaves

Red oak trees can be found in the upland woodlands at the northern end of the water trail, between Lentsch and Cunningham accesses of the water trail.



Riffles and rapids

Iowa DNR file photo

The Lizard offers a number of opportunities to hone your river reading skills. If you choose the wrong line, your boat might scrape or get stuck on a riffle, but in rapids your boat might get pinned against a rock or capsize. The last stretch requires navigation through a number of rapids—stay alert and choose your lines carefully!



Glacial erratics

Large rocks and boulders were left behind after the glaciers retreated from Iowa, around 12,000 years ago. These erratics range in size from a basketball to a Volkswagon, serving as perches for wildlife and obstacles for paddlers.

Stream Reach: Lentsch Access to Cunningham Access (3 miles)

Like most of Lizard Creek, the water is clear and fast-flowing through this section. This is a beautiful stretch to paddle, but not one for beginners. Although much of the bottom is sand and silt from erosion upstream, the channel is populated with glacial erratics, boulders left behind by the last glacier retreating some 12,000 years ago, providing perches for birds and turtles and downstream eddy habitats for fish and aquatic invertebrates. They also provide challenges to paddlers at some water levels. Like many Iowa rivers and streams, Lizard Creek is subject to rapid rises and falls in water level. As such, rocky riffles, or rapids, get drowned at higher water levels, hide just beneath the water's surface, create hazards to avoid, or make portages necessary at low water levels. At the gauged water level of about 5.4 feet, none required portaging around or over, but at least 14 in this 3-mile-stretch were significant and not to be taken for granted by paddlers. They provide some excitement, to be sure, but can be hazardous if the unwitting novice or the over-confident or unskilled paddler ignores them. The water is not deep, generally, and the bottom is often filled with sand between the boulders, but holes of 4–5 feet in depth are also common.

This stretch is short but filled with a sense of wildness. High banks, sometimes more than 40 feet high, rise in places along this stretch. The soft sandstone is often topped by softer loess accumulations. The riparian corridor is treed over the vast majority of this section. The woodland is diverse and, in some areas, has attained great age and size. Some specimens of oaks and walnuts are particularly impressive, having likely been mere saplings when Euro-Americans began to settle the region. In some sections the forest is younger but still diverse in species. Where young cottonwoods and silver maples are taking root, they share the sunlight for now with sumac and elderberry shrubs, as well as some sun-loving herbaceous plants like swamp milkweed, curly dock, and sweet clover. Vines of Virginia creeper, grape, and wild cucumber climb trees and drape over branches along the shoreline, in search of the sun.



Swamp milkweed in bloom

These flowers attract butterflies and bees and thrive in wet and muddy soils. As a milkweed plant, it is an important food source for the monarch caterpillar.



Adult bald eagle

Bald eagles make use of the large old trees along the riparian corridor to hunt fish and nest. They can be seen at water riffles spotting fish in the rolling water.

Kingfishers rattle as you invade their stretch of the stream and fly downstream, just far enough to figure you are non-threatening, then back upstream once you are past. Great blue herons wade the shadows in search of fish meals. Minnows and larger fish dart in the clear water beneath your boat, the barely visible objects of the heron's and kingfisher's hunts. Bald eagles, too, make use of the fish in the stream, as well as the large old trees of the riparian corridor. Male cardinals sing from streamside branches, anxious to impress their tawny-colored mates with their vocal abilities. In mid-to-late summer, bullfrogs call from stagnant eddies below a rocky riffle in the stream. Raccoon and opossum tracks on a sandy shoreline tell of their previous night's exploits. Fresh mussel shells on the sand and rock bars reveal both the stream's relative health and the success of nocturnal hunters. Deer wade and then bound across the shallow stream, surprising an unwary paddler. Rough-winged and bank swallows twist and turn in the air, catching insects on the wing to feed their growing young in the streamside holes they have dug in the loess banks and soft sandstone bluffs. Downy and red-bellied woodpeckers frequent the many dead snags along the shoreline in search of food and shelter. House wrens, rose-breasted grosbeaks, yellow-billed cuckoos, and even scarlet tanagers call from the trees, testimony to the size and quality of the surrounding woodlands. In more open areas, goldfinches, common yellowthroats, and song sparrows add their agreement. While tree cavities are common, at least one great horned owl pair makes use of a tangled root mass at the stream's edge for their nest. Great horned owls, apparently, aren't so picky about their nest site, knowing that they can easily defend it against all local predators. As you paddle below the Haynes Avenue bridge, hundreds of cliff swallows fill the air above, piling out from their pottery nests attached to the cement bridge supports.

Both the Lentsch and Cunningham Accesses are excellent, with adequate parking and graveled trails to the stream. Both are just downstream of bridges that cross the creek (Fairbanks and Haynes Avenues, respectively). Both are well-marked at the roadsides and Lentsch has interpretive signage that is appropriate to the creek. No other public land is present along this stretch.

Recommended Experience Classification: **Intermediate**



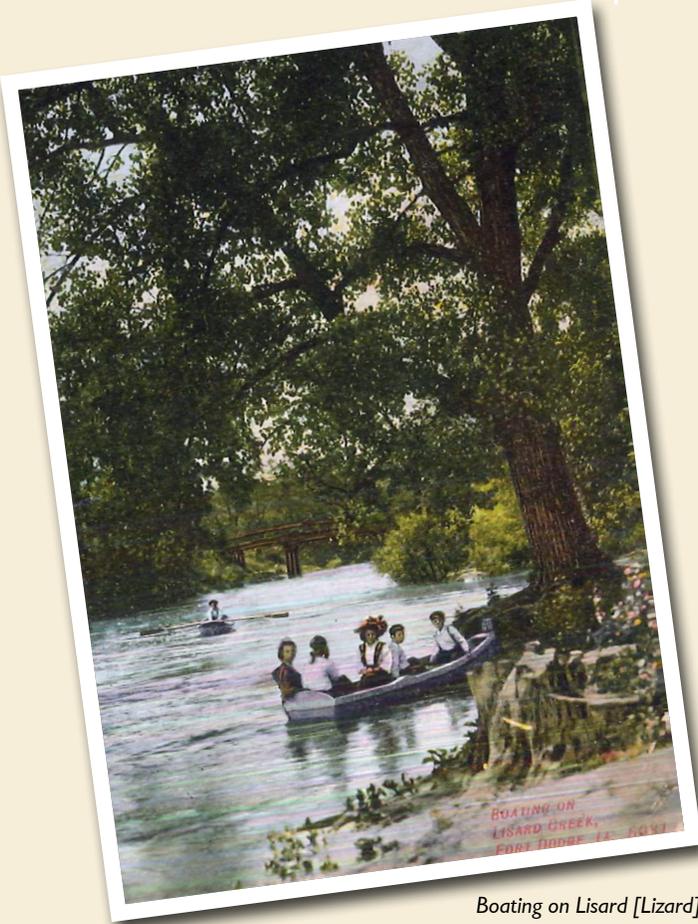
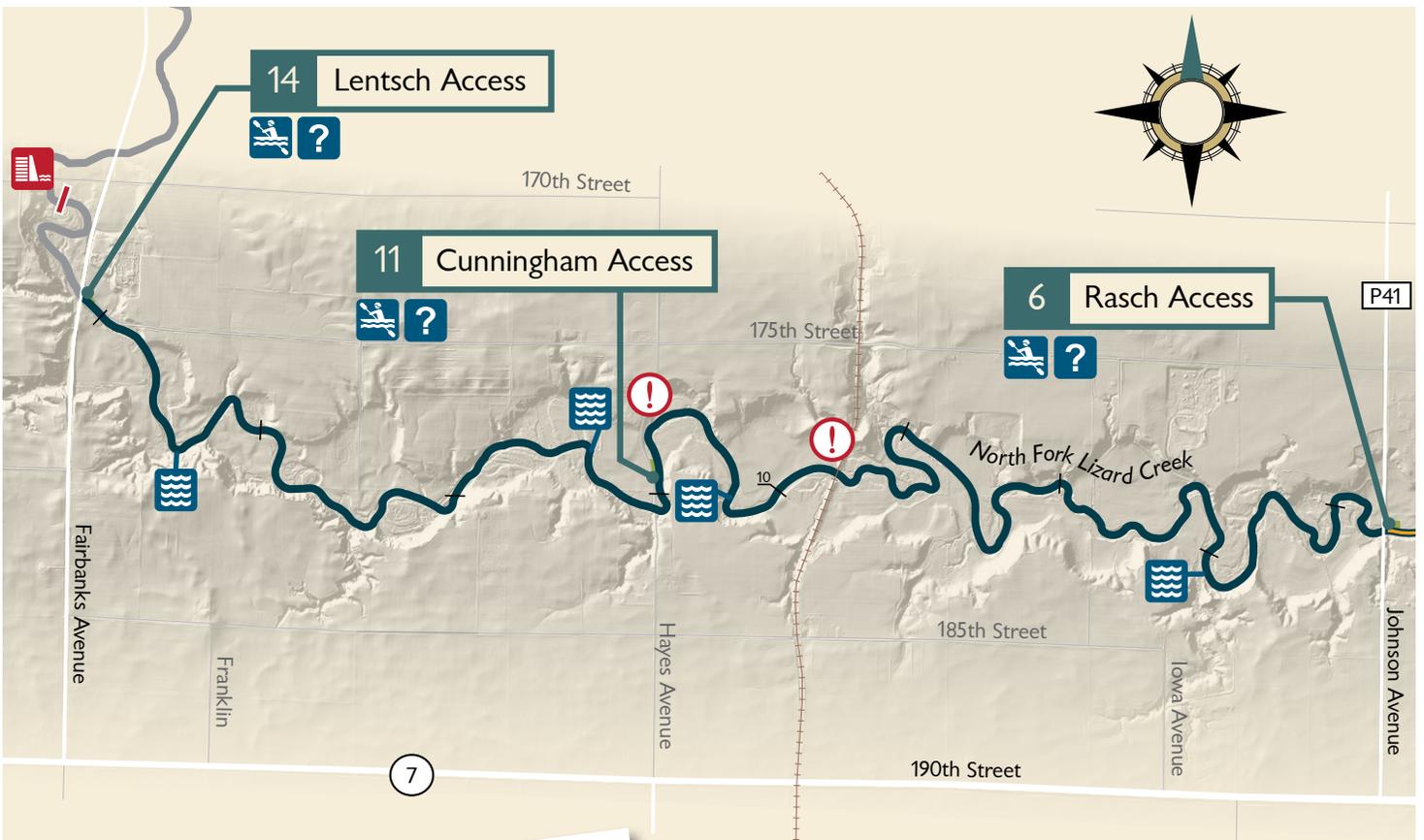
Musk thistle, vervain, and mullein

A mix of native and introduced plants populate the pastures surrounding the water trail, but cattle will not eat them. Musk thistle, in particular, is considered a noxious weed in most of the United States with its red-purple flowers and sharp spines.

Musk thistle

Modified from photo by Betty Wills (Wikimedia Commons)

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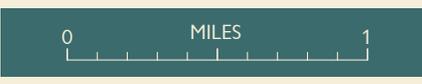


Boating on Lisard [Lizard] Creek postcard, early 1900s

KEY

- Intermediate Level
- Advanced Level
- City/Town
- Public Land
- Paved Roadways
- Gravel Roadways
- Carry Down Access
- Shelter
- Dam
- Rapids
- Point of Interest
- Information
- Paddlers Be Aware:
 - electric fence over stream

Note: Access numbers correspond to the distance in river miles calculated from the mouth, then rounded up. To figure the approximate distance between two accesses, subtract the lower access number from the higher access number.





Large walnut tree

Walnut, ash, hackberry, boxelder, and elm trees are common on benches above the creek.



Elderberry blooms and fruits

Stream Reach: Cunningham Access to Rasch Access (5.5 miles)

Lizard Creek continues its circuitous flow downstream in the stretch, nearly folding back upon itself several times. Unlike the section above Cunningham Access, this section is more impacted by agricultural land-use, especially in the first four miles. Less than ½ mile below the Cunningham Access, the stream passes through a pasture. Paddlers must maneuver beneath an electric fence (marked by a sign on a tree only) and through several rock riffles in the creek. The pasture is overgrazed, banks are broken down, silt and algae fill the creek bottom, and cattle often stand in the creek. Some trees and groves still exist in the pasture, offering the cattle shade on hot summer afternoons. The only herbaceous plants taller than a few inches are thistles, vervains, and mullens, all plants that are non-preferred by cattle. After about ¾ of a mile, one must pass beneath another (unmarked) electric fence, maneuver through two rocky riffles, around a curve, and beneath a large wooden railroad bridge trestle that has brush and logs piled up against it from flooding, all in about 50–75 yards—possible but not for the unskilled paddler. Further down, another pasture is fenced, primarily to keep the cattle out of the adjacent cornfield, but not to keep them out of the creek.

In several areas, the creek has only a narrow treed riparian zone between it and adjacent cropland. Even on the top of slipping loess bluffs, high above the creek, the corridor appears to be very narrow or to have no planted buffers, a fact contributing considerable erosion directly into Lizard Creek. Where the riparian corridor is wooded, especially in the last 1.5 miles of this stretch, trees are typical of the region, with oaks, walnuts, basswoods, and ash typically found, some specimens quite large. Loess and sandstone bluffs rise above the creek in turns of the creek, providing dramatic and beautiful views, as well as diversity in habitat. Bank and rough-winged swallows dig holes in the most precipitous of the banks. Bank swallows dig tunnels from one to several feet deep, in colonies from a dozen to a hundred or so. Rough-winged swallows are more singular, digging from one to three holes in a steep bank, often more hidden beneath the bank than their bank swallow cousins. The bluffs, as in the first section of Lizard Creek, are slipping in many locations, toppling old oaks and maples off their summits and exposing new soil for pioneer plant species and the animals that come with them. Unfortunately, such slippage contributes considerable silting downstream.

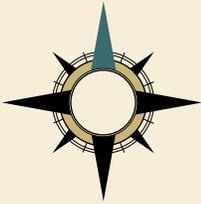
Wildlife species found in the previous Lizard Creek section are still present: herons, kingfishers, cardinals, and several swallow species are common. Because much of this stretch is more open, some wildlife species more typical of such areas are found. Orchard orioles, eastern kingbirds, red-winged blackbirds, common yellowthroats, indigo buntings, and spotted sandpipers are present, responding to the younger, pioneer plant species along this section. Swallowtail and red-admiral butterflies can be seen sucking moisture from the mudflats in the pasture and red-tailed hawks perch in trees nearby, searching for small mammals in the grass. Eastern phoebes take advantage of some bluff overhangs to nest in the lower portion of this section, using tree branches as hunting perches. A few softshell turtles bask in the sunlight, often on the lower ends of mid-stream sand and rock bars. White suckers, a bottom-feeding Cyprinid, are common in this stretch, often exceeding 12 inches in length. They take advantage of the algae that commonly grows on the bottom in this section, a product likely of the high organic and nutrient content of a stream that has cattle in it. There is also evidence of beaver inhabiting the stream: the 45-degree cuts on willows growing along the stream or on mid-stream sandbars and the removal of bark and leaves is testimony to their presence. While not abundant, they take advantage of available habitat.

The accesses that bookend this section, Cunningham and Rasch, are both excellent, providing ample parking, signage, and graveled paths to the creek.

Recommended Experience Classification: **Intermediate***

**The combination of electric fence across the river, rocky riffles with swift water, a curve in the creek, and a railroad bridge with logs piled up against the bridge supports, plus cattle sometimes standing in the creek, make the pastured section below Cunningham Access particularly difficult.*

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Spiderwort at Rasch Access



KEY

-  Intermediate Level
-  Advanced Level
-  City/Town
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-  Gravel Roadways
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-  Rapids
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Stream Reach: Rasch Access to Phinney Park (6 miles)



Limestone bluffs

Limestone bluffs border the water trail just below the Highway 169 bridge less than a mile upstream from Phinney Park Access.

For paddlers, this section is the most challenging of the three sections of Lizard Creek. Between Rasch Access and Phinney Park, there are at least 25 rocky riffles, or rapids, with varying degrees of difficulty for paddlers. The creek continues to twist and turn through a mostly wooded valley in this stretch, while still impacted by the land uses beyond the wooded edge. Soft sandstone overlain with loess characterizes the creek-side exposures and they gradually give way to limestone exposures in the valley, especially after passing beneath Highway 169.

North of Highway 7, the wooded corridor provides valuable habitat for wildlife. Great blue herons and kingfishers are common in the area, taking advantage of the fish in the creek. The waters are well-oxygenated, flowing swiftly and bubbling over the rock gardens. Dragonflies, damselflies, and other aquatic invertebrates are common, in response. Softshell turtles respond similarly, frequently seen basking on the many rock bars in this section. More mussel shell, largely missing in the last section, reappears in this area. Baltimore orioles, rufous-sided towhees, scarlet tanagers, cardinals, wrens, and indigo buntings call from the trees. Cedar waxwings dart out from their perches on overhanging tree branches, “hawking” for insects. Turkey vultures and red-tailed hawks soar overhead and deer can be seen at the stream’s edges. Bald eagles can be seen around the many riffles, awaiting fish to be revealed in the roiling water.

In some portions, however, row crops are visible just beyond a very narrow treed border, and sometimes a buffer consists only of 3–4 feet of brome grass. In one area, the lack of a buffer has allowed considerable crop residue to erode onto the slope below and into the stream. Corn stalks and bean residue are visible in the water. Downstream from Highway 7, the creek passes through an industrial zone where gypsum has long been mined. The loud drone of machinery, trucks, and cars is ubiquitous for approximately the next two miles, beyond the two bridges of Highway 169.

Gypsum has been an important natural resource to Fort Dodge since the 1850s. Initially used locally in blocks for constructing buildings, it began to be used for plastering

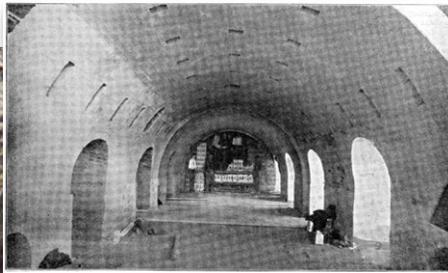
locally in the 1870s. The railroads eventually allowed gypsum and gypsum-based products to be exported to other cities around the nation. Fort Dodge gypsum remains as both an important industry in Fort Dodge and one of the nation’s premier suppliers of gypsum board and other products.

Gypsum is a mineral that was formed in the sediments of the inland sea that covered much of central North America during the Jurassic, some 145–200 million years ago. It’s considered an “evaporate”, a mineral left behind in sediments as the seawater withdrew and salts evaporated. There are other gypsum deposits in other parts of Iowa, to be sure, but the Fort Dodge beds are the closest to the surface and easiest to mine of them all.

The final access on Lizard Creek, the Phinney Park access and ramp, is located on river right (south bank), just a couple of hundred yards above the confluence of the Creek with the Des Moines River.

The diversity of tree species remains high as it is along the earlier sections of the water trail. Riverbank grapes vine over branches along the creek edge. Red cedars grow on the rocky edges of some sandstone and limestone bluffs, particularly below the Highway 169 bridges. They occupy the cliff edges beneath old growth oaks and both are threatened by the sloughing of the bluffs. In a couple of locations, fallen trees become sweepers in the creek.

Recommended Experience Classification: **Advanced**



Interior of continuous kiln as illustrated in the 1900 publication Brick

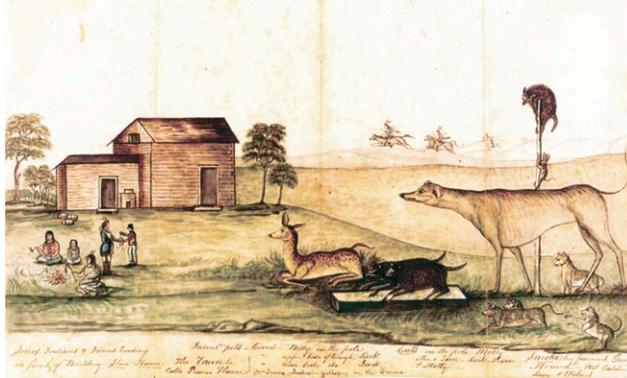


*Archaeological excavation trench
From the archives of University of Iowa Office of the State Archaeologist*

Immediately south of Phinney Park access lies the historic Fort Dodge Clay Works archaeological site. The facility manufactured brick and tile for a short time between 1892 and 1907. The plant featured an important innovation for its time, a large continuous kiln measuring 66 by 174 feet. Archaeological investigations identified several intact portions of this plant, and, in conjunction with its limited and historic role in a poorly-understood industry, primes the site to be eligible for listing in the National Register of Historic Places.



Ox-eye daisy (false sunflower) in bloom, Phinney Park
 These small sunflower-look-a-like prairie flowers bloom from early summer to mid fall and attract butterflies, bees, and some beetles.



Sketch showing Dakota trading with James Williams by William Williams, ca. 1853
 From the archives of University of Iowa Office of the State Archaeologist

The Fort Dodge area was one of the last areas inhabited by Native Americans in the 1800s. Some of their camps were noted in the 1830s by Albert Lea. William Williams, the founder of Fort Dodge, traded with the Dakota and made illustrations of them racing on the plains and trading with his son. The Dakota and affiliated tribes were known to camp around the Fort Dodge area until the Dakota Uprising of 1862.

Photography: All photographs are attributed to Jim Pease unless otherwise noted.

BE SAFE OUT THERE!

Follow these safety TIPS to keep your trip enjoyable:

- Pack only essentials and keep them in waterproof bags.
- Check the river water levels and currents before each trip.
- Know the weather forecast, including areas upstream, and stay aware of the weather on your trip.
- Make sure someone knows your planned entry and exit points and estimated times.
- Always wear a properly-fit life jacket.
- Expect overhanging trees, logjams, and other obstacles, such as bridge abutments or big rocks. If paddling around them is not possible, get out and portage around them. Grabbing onto tree branches may capsize your paddlecraft.
- Always portage around lowhead dams. Surface appearance can be deceiving. Undercurrents can be strong enough for drowning.
- If you capsize, remain on the upstream side of your boat to prevent being pinned.
- Dress appropriately for weather conditions (including air and water temperatures), and avoid weather and water conditions beyond your skill level.

KNOW YOUR SKILL LEVEL!

- **BEGINNER:** Segments are generally less than six miles. Hazards are few and easy to avoid in normally slow-moving currents. Users can easily access these segments from parking areas, and will not need to portage, except to walk a boat around some shallow riffles or to make going around an obstacle easier.
- **INTERMEDIATE:** Segments are generally less than nine miles. Users should be able to recognize and avoid hazards in moderate river flow. The need to portage is rare, but users should be able and willing to carry boats and gear a short distance. Access to the river may involve a short portage, and the launch or take-out may be a bit difficult.
- **ADVANCED:** Segments may exceed nine miles. Hazards are likely and often occur in fast-moving water. The need to portage may be frequent or may involve carrying boats and gear a long distance. Access to the river may involve a portage, and the launch or take-out may be from steeper banks or faster moving water.

BEHAVE AS A GUEST!

- Respect private property. Only use public lands and access points.
- Be considerate of others in your group and on the banks.
- Give anglers a wide berth.
- Never change clothes in public view.
- Never litter. Always pack out trash.
- Do not disturb wildlife.

Other Resources:

Paddler Safety Information:
www.iowadnr.gov/Things-to-Do/Canoeing-Kayaking/How-to-Paddle

DNR Interactive Paddling Map:
www.iowadnr.gov/paddlingmap

Webster County Conservation
 515-576-4258

City of Fort Dodge (Parks & Recreation)
 515-576-7237

