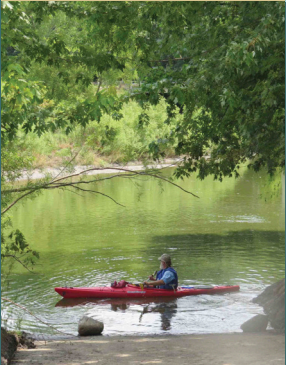


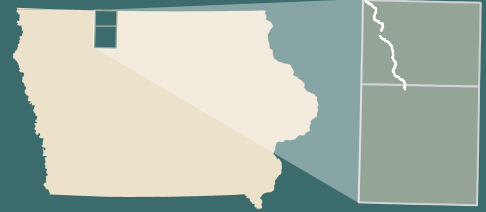
WEST FORK OF THE DES MOINES RIVER WATER TRAIL



EMMET COUNTY

The West Fork of the Des Moines River is a non-meandered stream. That means the stream bed and banks of the river are considered part of the adjacent property. River users on these “non-meandered” segments may have only the right to float on the water surface, depending on ownership.

The river is used for canoeing, kayaking, fishing and tubing. Water levels generally do not support the use of motor boats or jet skis, but occasional use



EMMET COUNTY

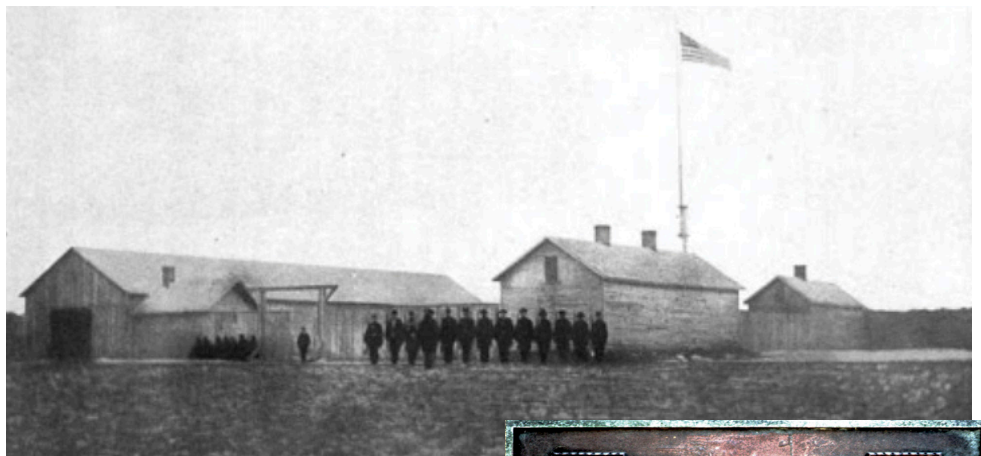
occurs during high water events. There are currently no livery or boat rental businesses serving this portion of the West Fork of the Des Moines River.

WEST FORK OF THE DES MOINES RIVER - FROM THE MOUTH OF GLACIERS: A RIVER AND ITS HERITAGE

The West Fork of the Des Moines River flows through the Des Moines Lobe region, featuring low relief with lakes, shallow depressions, and marshes caused by retreating glaciers.

Overall, this water trail is sinuous with tight curves. North of Estherville the river feels fairly wild with few human-built structures visible from the water. Various habitats and wildlife can be seen, especially where the river flows through 4-Mile Lake Wetland Complex and Anderson Prairie State Preserve.

You might also feel a connection to our historic past knowing that early American settlers camped and built settlements and mills along the river.



Fort Defiance, originally Fort Ingham, was built in 1862 in Estherville to protect settlers from conflict with Native American groups. It was occupied by troops until the fall of 1863, and then was used as a residence until it was dismantled in 1876.



Plaque for the Fort Defiance monument



Monarch butterfly on purple prairie coneflower

Modified from
Wikimedia Commons



Bank swallow nests in the river cutbank. Note fewer nests in the gravel and more in clayey layers.

WEST FORK OF THE DES MOINES RIVER WATER TRAIL



Artifacts from Crim site
Modified from Iowa DNR file photos

South of the North Trailhead access, the Crim archaeological site has traits from three distinct, but interrelated prehistoric cultures (Late Woodland, Great Oasis, and Mill Creek). It is unclear if these different groups occupied the same site or if it is a location where these cultures could have interacted and shared ideas or traded goods.



Freda Haffner Kettleshole State Preserve

Iowa DNR file photo

Southeast of Lammer's Landing is an excellent example of "kettled" topography, pockmark-like landforms that sometimes fill with water. Each kettle is where an iceberg grounded and was buried by outwash sand and gravel. When the Wisconsin glacier retreated from Iowa around 12,000 years ago the overlying sand and gravel collapsed into the void.

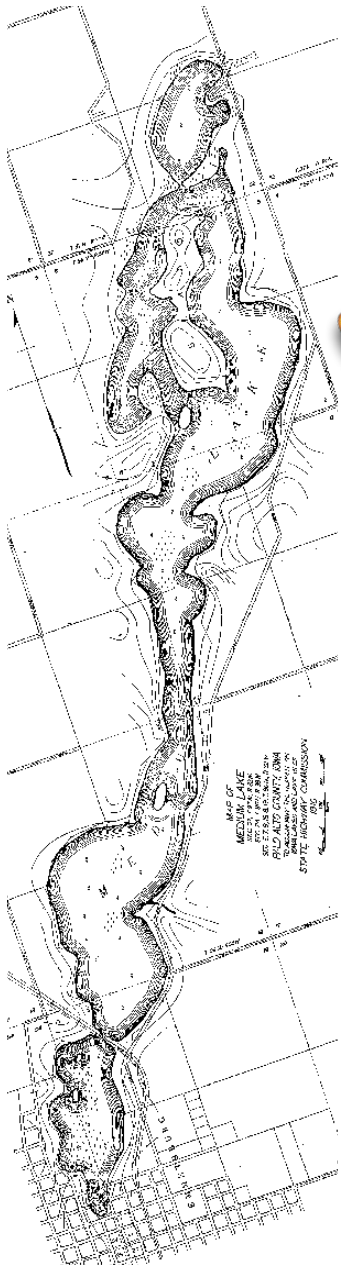


Photo by Donald Hall



Sulphur butterflies

The butterflies feed on moisture and minerals from the wet sand on beaches in what is called "puddling."

1916 map of Five Island Lake

From University of Iowa Office of the State Archaeologist archives

The shores of Five Island Lake, southeast of Lammer's Landing in northeast Emmetsburg, have yielded a sizable collection of artifacts and animal bone. The stone tools and pottery indicate that people were in this area for over 8,500 years between the late Paleoindian to historic time periods, likely taking advantage of the natural marshy landscape to trap or kill animals.



Estherville meteorite at the Smithsonian

Photo provided by Meteorite-Recon.com

A large meteor struck the earth two miles north of Estherville on Sunday afternoon, May 10, 1879. The impact of the nearly 700-pound meteor was felt 50 miles away. It is the largest observed fall of a mesosiderite, a very rare class of stony-iron meteorites. Portions of it are on display in Estherville as well as at the Smithsonian Museum of Natural History.

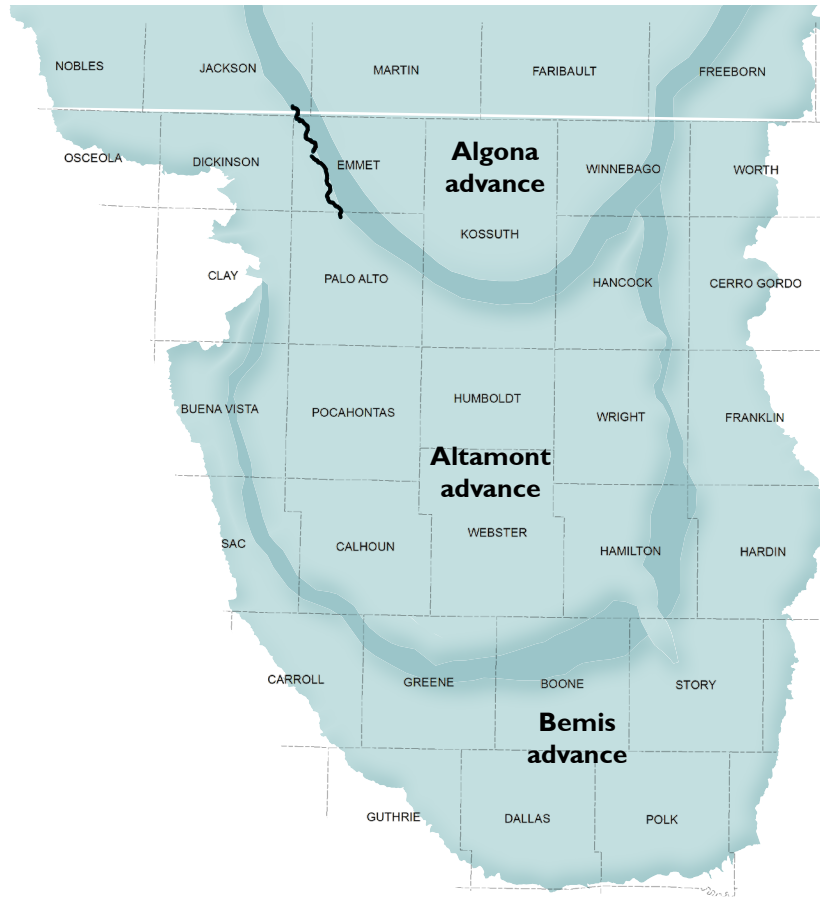
WEST FORK OF THE DES MOINES RIVER WATER TRAIL

DES MOINES LOBE

The Des Moines Lobe is Iowa's youngest (newest) landform region. The glacier first entered Iowa about 17,000 years ago, retreated and advanced multiple times, then finally melted in Iowa about 12,000 years ago.

The water trail flows from the Algona moraine, the outer extent of the Algona advance of the Des Moines Lobe. Meltwater issuing from the glacier of the Algona advance formed a post-glacial stream that became the West Fork of the Des Moines River.

Signatures from the glacier can be seen in areas of rugged topography and deep potholes caused when buried glacial ice collapsed under the overlying till top soil. Isolated boulders were transported and abandoned when the ice melted. Bluff lines formed along the river from millennia of water erosion.



Oak savanna uplands between Accesses 88 and 82

Stream Reach: Petersburg, MN Access to North Trailhead Access (9 Miles)

This section begins at the Parkersburg, Minnesota Canoe Access, along N22, northwest of Estherville. It is about 2 river miles to the Iowa border. The access is a carry-down ramp just below the bridge. In the Minnesota portion, a campground along the river is indicated by a sign easily visible from the river.

Stream Reach: North Trailhead to 4th Street Access (6 Miles)

The North Trailhead Access is a motor boat ramp off 130th St. (A-17) north of Estherville. The river flows generally southeast for much of this stretch. There are significant meanders along the way, contributing interest for paddlers and habitat for wildlife. Beaches on the inside bends are common and a good deal of mussel shell is often present on those beaches. A great variety of wildlife are common along this stretch, including herons, shorebirds, songbirds, owls, hawks, eagles, beavers, and turtles. Wildlife are particularly abundant as the river flows through the Anderson Prairie Preserve and Wildlife Management Area, the central 6 miles of this paddle.

Banks are often steep and trees that have fallen into the water with erosion can challenge paddlers, especially in low water. The glacial history of this area of the Des Moines Lobe is readily apparent as granite rocks and boulders frequently line the banks, forming a natural rock rip-rap in some areas, topped by alluvial soils. Glacial boulders are also visible "growing" from the grasslands above the river, especially in the section that travels through Anderson Prairie State Preserve. Side-hill seeps and fens, common in this region, are visible to observant paddlers, characterized by swamp milkweed, cattails, sedge hummocks, and other aquatic plants visible on hillsides well above the river level.

WEST FORK OF THE DES MOINES RIVER WATER TRAIL



97 Petersburg



MINNESOTA

IOWA

88 North Trailhead



Ringham Habitat Area

Anderson Prairie State Preserve

Anderson Prairie Wildlife Management Area

Eagle Lake Wildlife Management Area

SUPERIOR

KEY

- Beginner Level
- Intermediate Level
- Advanced Level
- City/Town
- Public Land
- Paved Roadways
- Gravel Roadways
- County Line
- Boat Ramp
- Carry Down Access
- Shelter
- Dam
- Rapids/Rock Dam
- Point of Interest

Water trail ends here and reconvenes at School Creek Access below the dam

82 4th Street Bridge Access

81 School Creek Access

Historic Swinging Bridge

W Central Ave

South Riverside Park

ESTHERVILLE

Fort Defiance State Park

School Creek

Park Rd

180th St

WEST FORK OF THE DES MOINES RIVER WATER TRAIL



Sullivan's Milkweed

Photo used with permission by Jennifer Anderson-Cruz

A high diversity of wildlife and prairie habitats are present in the Anderson Prairie State Preserve. From dry upland hilltops to wet swales and marshes, over 200 plant species and 22 mammals, 27 birds, and 5 amphibians and reptiles live here. Prairie birds such as bobolink and meadowlark also nest here.



Swinging bridge at Estherville

Recently refurbished, this swinging bridge north of Central Ave was first built by WPA relief workers in 1937 so pedestrians could safely cross the river. A similar bridge was built south of Central Ave, but was damaged twice in floods and permanently removed in 1990.

The river's glacial history and changing channels have also provided for 21st Century humans, evident in the two large sand and gravel mining operations visible from the river in this stretch. Only a few privately owned sections have bends lined with waste concrete chunks or tires.

Emmet County is particularly rich in both prehistoric sites and historical incidents. The earliest evidence of human activity within the river valley is from the Late Woodland culture, but evidence also confirms the existence of Late Prehistoric cultures, as well. Likewise, two known impact sites from a meteor that struck earth north of Estherville in 1879 are present in Emmet County, one on either side of the river near Anderson Prairie.

Like many Iowa rivers, the shoreline is lined with trees along much of this stretch. Some lowland hardwood forests are found, dominated by silver maple mixed typically with cottonwood, box elder, and willow, with some elm and ash. On benches 8 feet or more above the normal river level, bur and white oaks are found. They are also present in more open savannas visible from the river. Also in that area, hawthorns and some sumac clones can be seen from the river, typical of some savannas and prairie edges. Grasslands vary from the pristine prairies of Anderson Prairie State Preserve to grazed pastureland. Some woodlands are found on some of the higher hills along the river, characterized by white and bur oaks, basswood, and hackberry well up from the river. On river meanders, sandbar willows dominate the inner curves, holding the beach sand and gravel in place. River bottom grape vines and Virginia creeper drape down banks and over the water, clinging to overhanging tree branches. Reed's canary grass sometimes dominates the understory on banks beneath river-bottom silver maples.

The 4th Street Bridge Access has a concrete boat ramp and parking lot, the ramp facing up-river. The water trail ends at this access and resumes at the School Creek Access in Mike Mickelson Park in Estherville.

Recommended Experience Classification: Advanced, due to distance and constantly changing nature of log jams in this section.

Stream Reach: School Creek Access to Peterson Access (8 Miles)

The School Creek Access is a concrete "washboard" boat ramp below the low-head dam in Mike Mickelson Park in Estherville. It faces upstream so may be challenging in swift water but is otherwise fine for paddlers to use. This section parallels Highway 4 in a south-southeasterly direction.

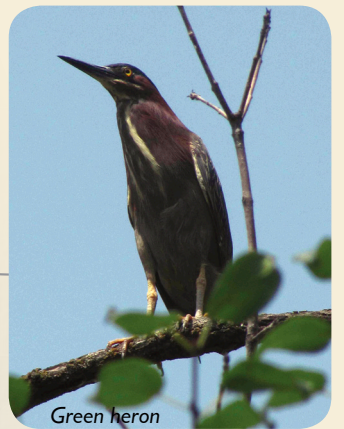
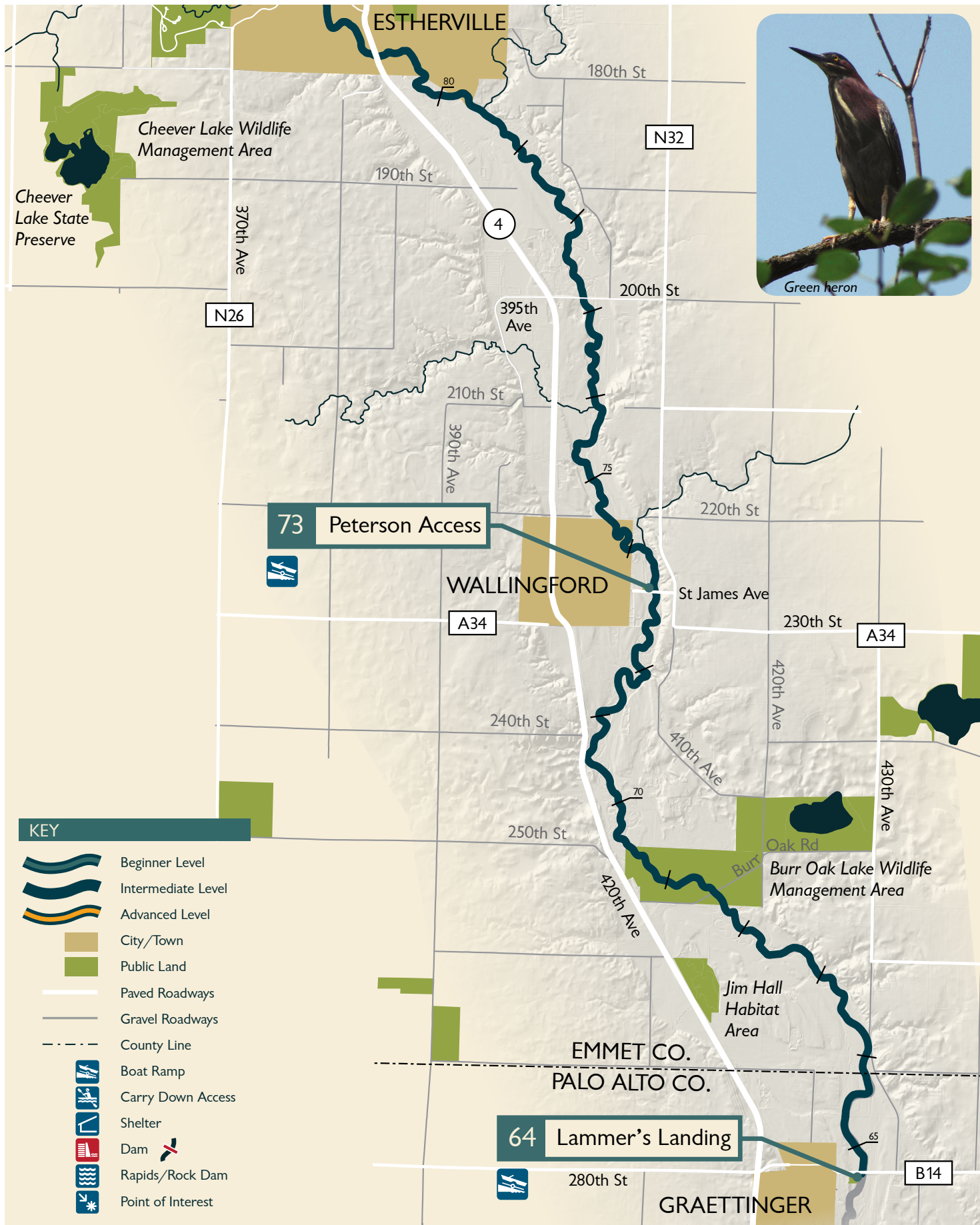
The paddle to Wallingford and the Peterson Access yields a variety of river wildlife. Snapping and softshell turtles are commonly seen, cliff, bank, rough-winged, tree, and barn swallows are frequent along the route, and wood ducks, Canada geese, and other waterfowl are often seen in this stretch. Quiet paddlers will see an abundance of wildlife along this stretch.

Not flowing through any public land to Wallingford, the river meanders through a mostly narrow corridor of natural vegetation, ranging from woods to pasture, to cropland. The river is often fenced, keeping pastured cattle out of the river and off of its often steep banks. Mid-river sand and rock bars lurk just below the surface in many areas, populated often by mussel shell, indicating a reasonably healthy mussel population. Frequent snags, especially at the outside bends of meanders, provide both habitat for catfish and smallmouth bass and challenges for paddlers to avoid in occasionally swift water. Some larger piles of snags may require short portages around them or careful paddling to avoid strainers.

The Peterson Access is just east of Wallingford on the northwest side of the 280th St. Bridge, and has good parking and a cement boat ramp for easy access.

Experience Classification: Intermediate

WEST FORK OF THE DES MOINES RIVER WATER TRAIL



KEY

- Beginner Level
- Intermediate Level
- Advanced Level
- City/Town
- Public Land
- Paved Roadways
- Gravel Roadways
- County Line
- Boat Ramp
- Carry Down Access
- Shelter
- Dam
- Rapids/Rock Dam
- Point of Interest

Stream Reach: Peterson Access to Lammer's Landing (9 Miles)

The river flows south-southeast from Peterson Access, paralleling Highway 4, lying usually .25 to .5 miles east of the highway. The 9 miles to the Lammer's Landing Access passes through both private and public land. Turtles, birds, beaver and other wildlife are all in evidence along this stretch, as they were in the previous section. Turkey vultures soar over the valley, searching for food. More cropland is closer to the stream than in previous sections and cattle graze streamside.

The middle mile of this section of river passes through Burr Oak Lake Wildlife Management Area and under Burr Oak Road. Both bottomland woodland and prairie edge hawthornes are visible from the river. Pheasants fly from the adjacent grassland and mourning doves nest in the protective thorny branches. Fox squirrels emerge from the bottomland trees to get a drink from the river. The shaded areas make for much cooler paddling and lower water temperatures. The last mile or so of the paddle to Lammer's Landing is deeply wooded, the bottomland silver maples draping over the water. Lammer's Landing is a cement ramp with much rock rip-rap and is located on the southwest side of the 280th St. Bridge.

Where woodland exists in this stretch, bottomland hardwoods include silver maple, boxelder, willow, and cottonwood, punctuated by occasional walnut, elm, and ash. Uplands are dominated by white and bur oak and some basswood. Grapevines overhang riverbanks, dangling from the branches of boxelder, mulberry, and others. These treed edges vary in depth from only one tree wide to 100-150 yards. Willows tend to dominate and stabilize the inside bends of the river. Some grasslands are adjacent to some sections of the river and consist primarily of brome grass, with some small patches of native warm season grasses and Reed's canary grass in wetter locations. Hawthornes are present in some locations in association with the grasslands.

Recommended Experience Classification: Intermediate



Emmet Co. Historical Society



A saw and grist mill was built on the river at Estherville in 1860. This

wheel was collected from the ruins of the mill and placed in the Estherville Rock Garden. Five mills are shown on the 1875 Andreas atlas but none have yet been explored or recorded archaeologically.



Juvenile bald eagle

After near extinction, bald eagle numbers eventually improved and began to thrive in Iowa again with over 400 nests currently along major and interior rivers.



Hawthornes were once common on Iowa prairies and can still be seen along some stretches of this Water Trail

WEST FORK OF THE DES MOINES RIVER WATER TRAIL



Deep wagon ruts across the landscape
From University of Iowa Office of the State Archaeologist archives

Early trails used by French explorers, Native Americans, and later by American settlers are mapped along the river corridor. One trail connected Fort Dodge to Fort Ridgely along the eastern bluffline of the river. Wagon wheel ruts can still be found at some of these trail sites.



Barred owl in flight
Photo by Tonia DeLong

The three most common owl species in Iowa are great horned owl, barred owl, and screech owl. The barred owl is the owl most likely to be seen by paddlers because it is more active during the day and tends to catch its food in the river.

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

BE SAFE OUT THERE!

Keep your trip enjoyable by following these safety TIPS:

- 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 the going easier around an obstacle.
- **INTERMEDIATE:** Segments are generally less than nine miles. Users should have ability 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:

DNR Safety Information:

www.iowadnr.gov/paddlingsafety

DNR Interactive Paddling Map:

www.iowadnr.gov/paddlingmap

City of Estherville:

712-362-7771

Emmet County Conservation:

712-867-4422

