

Report to IDNR River Programs
Interpretive and Informal Biological Reconnaissance
Des Moines Metro Area Waterways

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River Segment: Skunk River and Chichaqua River Bottoms

Interpretive Theme(s) suggested for this river segment: An altered river, but the wild still exists!

Stream Reach: Shreck Access to NE Yoder Dr.

UTM Beginning: 0457751 E – 4636397 N—Shreck Access

UTM End: 0475057 E – 4615160 N—Oswalt Bridge Access*

***Note:** no Water Trail signs exist at the Oswalt Bridge Access area in Jasper Co.

Approximate mileage: 16.7 miles

CFS average during this time period: 600 cfs

Description and interpretation of this section:

This is an easy paddle in a highly channelized section of the Skunk River. One must be wary of water levels on this river, but the 600 cfs paddled on this day meant that the current was a good carrier over most sandbars and snags that might be hazards at lower water volume. While strainers do exist in this river reach, none block the channel at this time. That, of course, can change as the watershed changes upstream. Though a bit long for some paddlers at nearly 17 miles, this paddle was completed in about 5.5 hours, including time for exploring some sandbars, side channels, and lunch. (Floaters, of course, take longer than paddlers.) It could be easily divided into two sections: Shreck Access to Chichaqua Access (and campground) at the 118th Ave. bridge, a distance of about 8 miles; and Chichaqua Access to Oswalt Bridge Access, a distance of just under 9 miles. In either case, it is important to check water volume, speed, and levels prior to paddling, as this river can be very fickle after upstream rains.

Being a channelized river, the banks tend to be steep and, depending on water level, high. They are nearly universally at about 45 degrees and the top 4-5 feet are mostly vegetated with grasses and some trees, though more scouring may be visible at lower water levels. While some trees exist in small sections, no woodlands are evident in the first half of this paddle. The land on both sides is privately owned and consists primarily of crop ground. Unlike many Iowa rivers, there is a small buffer between the river bank and the row-crop, so that, as yet, no crops are falling into the river. The second half of this paddle has the Chichaqua Bottoms public land all along the left (northeast) side of the river, so there tend to be more trees, more wild land, and more wildlife. In that section, there is some Chichaqua land on small sections of the right (southwest) side of the river, as well. In the final 2+ miles above the Oswalt bridge,

private landowners maintain considerable woodlands in the riparian zone. Taken together, then, the lower half of this paddle is more wild than the upper half.

Wildlife responds to the habitat available. In the upper half of this paddle, the river provides some of the only habitat in a sea of cropland, save for a few isolated oxbows of the pre-channelized riverbed. River birds are ever-present: great blue and green herons hunt for fish in the shallows; wood ducks and mallards hide in the branches of fallen trees in the water; spotted sandpipers do their bobbing tail dance on logs along the shoreline. Swallows, too, make their presence known, with tree swallows swooping over the water for insects in flight and cliff swallows building their clay pottery nests under bridges, attaching their nests only to the cement that allows the clay to stick. While they prefer cliffs, when none are available—as in most of north central Iowa—bridges over rivers seem to do just fine. Some deer and raccoons use the river in this section as an important source of water, as well. But the openness of the riparian corridor, with only scattered trees in a narrow wooded border between the river and the crop fields, means that birds of savanna and prairie habitats are more common. Flickers and red-headed woodpeckers, Baltimore orioles, Eastern kingbirds and other flycatchers, robins, cardinals, catbirds, and cowbirds—all are common along this upper half of the paddle. In the rare portions where the wooded corridor is a bit wider, more generalist woodland species can be found, including chickadees, nuthatches, blue jays, pewees, and even a bald eagle. Dragonflies and damselflies, laying eggs and catching insect prey on the wing, some species prepping for migration, are constant companions to paddlers.

In the lower half of this paddle, the presence of the Chichaqua Bottoms along the river guarantee that more wildlife species will be seen and heard. Though still primarily grassland, more diverse wetlands and woodlands can be found throughout, adding more diverse wildlife species, as well. While all of the species seen in the first half are still present, they are more common in this stretch. Kingfishers can be seen diving for fish and softshell turtles are found basking on mudbars. More butterfly and dragonfly species are present and goldfinches, dickcissels, and song sparrows can be found in abundance. Grosbeaks, downy and hairy woodpeckers, and even late-nesting yellow-billed cuckoos are found in this stretch. Red-tailed hawks and bald eagles, and nests of both, are built in this area, and great horned and barred owls can be seen along the shoreline. Blue-winged teal, likely nesting in the vast grasslands and wetlands of Chichaqua, fly over the river's channel.

But the Chichaqua Bottom area offers the paddler even more opportunity, if the water level is sufficient. Two old drainage ditches reach out from Chichaqua, emptying into the Skunk River. These two channels are quiet backwaters that allow the paddler to explore an area rich in wildlife. They open a world of beaver harvesting giant ragweed for nutritious leaves and seeds, of green herons dropping leaves into the water, baiting fish to come closer, and of Eastern kingbirds chasing dragonflies chasing skipper butterflies chasing flower scents. The diversity revealed to the silent paddler is amazing! More importantly, though, these quiet backwaters serve as the nurseries for countless fish fry, dragonfly nymphs, and midge larvae. Without these quiet

backwaters—and the wetlands and grasslands that surround them—the diversity of the Skunk River would be much impoverished. Paddlers of the Skunk should be thankful that Chichaqua Bottoms exists. Without it, this paddle would be mostly a paddle in a large drainage ditch.

Accesses along this river reach are reasonably well-maintained, though markings from the river are not in evidence. The Shreck Access is excellent, though silt often fills the entrance ramp. The Chichaqua Access is well-marked on the road but not on the river, so is easily by-passed by paddlers. The campground and picnic area are well-maintained, but a restroom is needed and would definitely improve the facility. The Oswalt Bridge Access is not marked, either on the highway or on the river, and its entrance road and canoe access could use some maintenance. There is also an unmarked access at the NE 112th St. bridge, with a small parking area. It is also not marked on the road or on the river. Both Chichaqua and Oswalt are plagued by deep mud and silt at the accesses. Rock may improve this situation, but probably not permanently, as long as Iowa rivers carry as much silt as they do and are as subject to flash floods as they have been in recent years.

Hazards are relatively few on this stretch. While some trees are in the water, they tend to not be hazardous, at least at this water level. There is a large gas pipeline and at least one set of large transmission lines that cross the river. A number of road bridges cross the river, but not all have accessible slopes. There is a landowner on river right (southwest side), just south of the NE 112th St. bridge, that has an old building, furniture, and hay that is slowly toppling into the river. That person appears to be waiting for the river to take it all “away” and should be informed that it is illegal as well as immoral.

Major vegetation groups along the reach:

Being a channelized version of what was earlier a meandering river, the vegetation is mostly typical of such environments. The channel is straight, the river not yet able to expend much energy in sinuosity. The sides are mostly at about a 45 degree angle and mostly vegetated with brome grass and Reed’s canary grass. Rock rip-rap is present in some locations, especially around bridges, and in at least one location just downstream from the Shreck Access, wooden barriers are in place to divert the energy of the river. The riparian corridor surrounding the river is very narrow, generally providing a few yards of buffer between adjacent crop fields and the river. Where trees are present, they tend to be mostly upland hardwoods, including bur oaks, walnuts, hackberries, honey locusts, and ash. Willows and cottonwoods are present in a few locations, and riverbank grape, poison ivy, and wild cucumber vines drape some sections of the bank.

Trees are more prevalent and the riparian corridor wider in the lower half of this paddle. The Chichaqua Bottom area, together with the private landowners of the last two miles of this river reach, provide a much wider riparian area and greater diversity of plants along the river. Trees include large cottonwoods and bur oaks, with hawthornes, dogwoods, elderberries, and buttonbush shrubs adding diversity. The vines increase in number and diversity, adding greenbriar and Virginia creeper, and

climb higher and healthier into the trees. A few poison ivy vines reach diameters of 1.5 inches in this area—a boon to wildlife, providing valuable fruit to species at multiple levels, though not favored, of course, by human tree climbers! On the public and private land in the last 3 miles of the paddle, the wooded corridor on river left (NE side) approaches a half-mile in width, adding great habitat diversity to the area. Some of the honey locusts maintained on private property, in fact, appear to be a thornless variety. The land on the SW side of the river maintains a mostly very narrow and sparsely treed corridor throughout.

Notable hazards and locations:

0459893 E - 4629574 N—Pipeline crossing river

0463968 E - 4625067 N—Transmission lines crossing river

Notable landmarks and locations:

0458968 E - 4631109 N—Adult bald eagle

0460160 E - 4629118 N—Large drainage ditch entering from west side of river

0463990 E - 4625065 N—Chichaqua Access and campground (sans outhouse)

0464839 E - 4624323 N—Bald eagle nest, river right

0466243 E - 4622625 N—Mouth of drainage ditch coming out of Chichaqua Bottoms

0471015 E - 4618482 N—Mouth of drainage ditch going back into Chichaqua Bottoms

Interpretive sub-themes: Fed by nearby backwaters, even channelized streams can have life.

Recommended Experience Classification: Gateway, if river levels are safe.

Stream Reach: Chichaqua Bottoms

UTM Beginning: 0464253 E - 4626775 N: Canoe access at Chichaqua Bottoms/Long Lodge/campground

UTM End: Same

Approximate mileage: 3+ miles

CFS average during this time period: N/A 4-4.5 feet deep

Description and interpretation of this section:

Chichaqua provides paddlers with unparalleled wildlife watching opportunities. Whether paddling slowly and quietly over the shallow waters or just sitting still and watching, wildlife is abundant in this quiet backwater area of the Skunk River. Once part of the original Skunk River channel, this bottomland offers paddlers the rare opportunity to take their time and to see things that, on a river, they might paddle or floats past, due to the current. The lack of current in Chichaqua Bottoms offers the opportunity to observe a critter, a group of critters, or a behavior as long as desired. It gives a chance not only to observe, but also to ponder “why?” Depending on the water level, a paddle in Chichaqua may be from 1 to over 3 miles in length. The lack of current and relatively shallow water (from 1 to 4 feet or so over most of the area) mean that this is family-friendly and appropriate for novice paddlers. However, it is not without

challenges. The fallen trees and branches, leaning snags, and sometimes thick aquatic vegetation mean that paddlers must be skillful and strong at times to get into some reaches of this area. But the put-in and take-out are at the same place, the access between the Longhouse and the restroom, so a paddle can be shortened or lengthened as the water level allows and paddler desires vary.

Just north of the access, there is a large island. To the right is the campground, a popular area for shore anglers and rock skippers. The left side of the island is more secluded and increases the likelihood of spotting turtles, herons, and other wildlife. To the north of the island, it opens up into a wider pond and the paddler has the opportunity to branch to the right (east) or left (west) out of the pond. The right branch goes beneath an old steel bridge, now used by hikers, and into the eastern backwater channels of Chichaqua, dominated by bottomland woodlands. The left branch goes through bottomland woodlands and more open marsh. If the water level is high enough, paddlers can go beneath the cement entrance road bridge (NE 126th Ave.) and into the ponds and open marshland south of the road.

Throughout the area, dead trees are common and provide critical habitat for nesting and roosting species. Over 60 species of Iowa vertebrate wildlife depend on standing or downed dead trees for nesting, brood-rearing, feeding, or over-wintering habitat. Primary cavity nesters, like the woodpeckers, are able to chisel out cavities for nests in standing dead trees. The Chichaqua area is home to pileated, red-headed, red-bellied, downy, and hairy woodpeckers and northern flickers, all of which are primary cavity nesters. Secondary cavity nesters take over homes created by woodpeckers or cavities created by rotting tree branches or insects. They include screech owls, bluebirds, tree swallows, chickadees, nuthatches, wrens, prothonotary warblers, tree squirrels, chipmunks, raccoons, wood ducks, hooded mergansers, and others. Fallen dead trees are important for many others, including salamanders, toads, moles, turtles, turkeys and many other birds species. Dead trees in the water provide aquatic habitat for fish, insect larvae and nymphs, bryozoan colonies, substrates and nutrients for aquatic plants, and critical roosts and basking areas for rails, sandpipers, herons, coots, ducks, water snakes, turtles, frogs, dragonflies, damselflies and other insects. So, while they may sometimes hinder paddling in these rich backwaters, paddlers should think "habitat, habitat, habitat" when encountering them!

Quiet backwaters like Chichaqua are critical habitat for many wildlife species, especially when they are connected to streams, rivers, and other waterways. The marshes, oxbows, and other riverine wetlands are the nurseries that support the whole chain of life of aquatic ecosystems. The rich substrate of these backwaters provides opportunities for emergent plants like smartweeds, pondweeds, blue flag, arrowhead, pickerelweed, water lily, watershield, buttonbush, cattails, bulrushes, grasses, sedges, and others to grow. Aquatic plants like coontails, elodea, *Azolla*, duckweeds, algae, and others add to the plant diversity. Aquatic insects, tadpoles, and fish fry consume the phytoplankton and zooplankton that enrich these waters. Larger fish, insect larvae and nymphs, frogs, turtles, snakes, spiders, herons and other birds, in turn, eat some of the frogs, fish, salamanders and insects that Chichaqua produces. Others make their way,

overland or via floods or waterways, to adjacent rivers and streams. Thus, step-by-step, Chichaqua backwaters provide wildlife to other parts of Central Iowa. Polk County Conservation Board staff and volunteers also supplement the habitat available by providing artificial nest structures for nesting birds. These can be seen along the waterways of Chichaqua. They include wood duck houses mounted on poles in the water and adjacent uplands (used by wood ducks, hooded mergansers, screech owls, and others), bluebird houses (used by bluebirds, tree swallows, wrens, and others), and duck nesting tubes (especially for mallards but likely used by others). All provide special advantages to help these birds avoid predation by other species and improve their nest success.

The Chichaqua Bottoms are, thus, a rich area for wildlife viewing. Although the paddleable area is only a small portion of the 8,600 acres of Chichaqua, it provides excellent wildlife watching. Over 175 species of birds can be seen at various times of the year, plus dozens of species of mammals, reptiles, amphibians, and insects. Paddlers will want to visit several times throughout the paddling season to maximize their viewing opportunities.

Cricket, leopard, green, and bull frogs all have distinctive calling and breeding seasons, from early spring through summer, and may be seen on logs or heard calling, depending on the day length, water levels, and temperatures. Non-poisonous northern watersnakes and garter snakes are common throughout the warm weather months, often seen basking on logs and overhanging branches. Painted and snapping turtles fish and warm up their "cold-blooded" bodies on sunny logs, ready to escape into the water at the first sign of trouble. Whirligig beetles zip and water striders skitter across the surface of the water, especially from mid-summer on, seemingly daring predators to catch them. Water boatmen, backswimmers, and water scorpions swim in the warm waters below, joined by dragonfly and damselfly nymphs grasping aquatic plant stems. Green herons perch quietly on branches or logs above the water, waiting and watching for unsuspecting fish or frogs to swim within reach. Deer come down from the woodlands to get a drink, while beaver emerge from their bank dens to harvest cottonwood and willow stems. Rose-breasted grosbeaks, catbirds, and cedar waxwings feed on the abundance of fruit in the late summer, harvesting chokecherries, dogwoods, and elderberries for food, only later to defecate the seeds elsewhere, helping the plants to spread. Cardinals, fooled by the similar day-lengths of spring and fall, call from the thickets of the woodlands at both times of year. Yellow-billed cuckoos, late arrivers and late nesters, can be heard calling from Chichaqua's woody underbrush in August and September before heading back to South America. Prothonotary warblers and yellow-throated vireos add their beautiful voices to spring and summer paddles through the woods, while red-winged blackbirds "oak-a-LEE" from every high spot in the wet, grassy meadows. Red-tailed hawks and turkey vultures soar high overhead, as swallows and kingbirds and phoebes search the lower air for insects. Secretive rails may be heard or seen in the area's thick emergent aquatic vegetation. Chichaqua is an area teeming with wildlife. The observant paddler should never be bored!

Access to Chichaqua Bottoms is easy by road in northeast Polk County. Water access is developed only in one place. While other accesses could be developed, it does not seem necessary or desirable. The trail is short, even in high water not exceeding 4 miles or so, and having only one access for ingress and egress makes car shuttling unnecessary and confines the noise and occasional disruption, to one location. Chichaqua is about the wild things that live there and should remain so.

Major vegetation groups along the reach:

Bottomland hardwoods are typical in much of the area. Some areas have woodlands composed almost entirely of silver maple but, more typically, woodlands are more mixed and include green ash, elm, honey locust, swamp white oak, box elder, cottonwood and willow. Bur oaks, white oaks, and white pines are found in adjacent, slightly higher spots. Honey locust in some locations betrays the area's earlier grazing history. Understory plants include dogwood, chokecherry, elderberry, and buttonwood shrubs and, near water, willow saplings. Riverbank grape and poison ivy vines are common along the water's edge throughout the area, often climbing high into dead tree snags. Buckthorn, once common throughout much of the eastern part of the area, seems to be reduced thanks to controlled burns, and although it can still be found in other locations, it is not dominant. Open areas of grasses and sedges are common, especially in the western portion of the area. Other plants include cardinal flower in both open and wooded areas, penstemon, dogbane, dock, and many other species. Numerous emergent, floating, and attached wetland species—mentioned above—are found in the paddleable wet areas of Chichaqua.

Notable hazards and locations: None

Notable landmarks and locations:

Interpretive sub-themes: Quiet backwaters, the nurseries for wildlife.

Recommended Experience Classification: Gateway

Photos and descriptions: 30 photos in SkunkRiv, 58 photos in Chichaqua

Recommendation on how/where interpretive information could be shared with the public:

The websites of Polk, Story, and Jasper County Conservation Boards should contain way-finding and interpretive information regarding this water trail. Interpretive signage should be placed at existing accesses along the Skunk and in Chichaqua. Additionally, maps and interpretive information could be made available through outdoor and paddling-related businesses and chambers of commerce in nearby towns and cities. Cell phone interpretive information—already available through both Polk and Story CCBs—could be developed for this water trail, as reception is not a problem anywhere on this trail.

Note: Information also available from: Iowa DNR Wildlife Diversity Program, "Chichaqua-Neal Smith Bird Conservation Area, Polk and Jasper Counties", available as a pdf at <http://www.iowadnr.gov/>
Information is also in "The Makoke Trail: A Guide to Birding in Central Iowa" available from www.iowabirds.org