

Lower Peshtigo River
Peshtigo, WI to the river's mouth
on Green Bay



Map and Self-Guided Tour
for the
PESHTIGO
RIVER
TRAIL

NATURAL SHORELAND FEATURES

The Peshtigo Harbor landscape was shaped over time by the Peshtigo River depositing glacial material and river sediments. The river and lakeshore are continuously changing, forming many natural shoreland features. These provide the foundations for the natural communities that occur here.

River delta: The delta occurs at the river's mouth. It is the fan-shaped plain formed over time when water from the river met the open waters of Green Bay. The river slowed and the sandy soil carried by the current dropped to the bottom. Many small streams branching from the main river crossed this sandy plain to reach the bay. Eventually those streams grew, forming the braided channels we see today. River delta deposits formed the sites where the harbor's emergent marsh and sedge meadow communities thrive. Deltas are unusual these days since many rivers are dredged for navigation.

Oxbow lake: An abandoned oxbow lake occurs when a river meanders, or curves back and forth across the land rather than flowing in a straight channel. Erosion and deposition occur in the stream channel so that eventually the river cuts off the curve and flows straight. A U-shaped lake remains, separated from the main channel by a narrow strip of newly deposited sediments. Abandoned oxbow lakes provide the sites where wooded swamps develop.

Beaches: The beaches consist of loose sand or other mineral particles that are affected by wave action. They extend from the water's edge inland to the area where permanent vegetation begins. Here the true beaches occur only along the bay.

Sandbars: Sandbars occur in the river and near the lakeshore where they are built up by currents or waves dropping their sediment load. Along with beaches, sand bars provide nesting, spawning and feeding habitat for shorebirds and migratory waterfowl.



WISCONSIN COASTAL
MANAGEMENT PROGRAM



For more information, please contact:
Marinette County
Land & Water Conservation Division
1926 Hall Avenue
Marinette, WI 54143
(715) 732-7780



Guided trips on the Peshtigo River Trail are offered for groups in connection with the TOAD (Teaching Outdoor Awareness and Discovery) educational programs. Six canoes—room for 18 people—lifejackets and paddles are available for use free of charge.

GUIDED CANOE PROGRAMS



The river receives annual spring runs of walleye, smallmouth bass, northern pike, sturgeon, brown trout, steelhead, and splake. In the fall, you'll find annual runs of king salmon, steelhead, brown trout, splake and walleye. Sturgeon run in the spring, but are illegal to catch on this river. Throughout the year, the river has healthy populations of smallmouth bass, catfish, northern pike, walleye and panfish. The first half mile of water immediately below the Peshtigo Dam provides excellent fly-fishing opportunities year round for rainbow trout, steelhead and seasonal opportunities for brown trout and salmon. The river also provides excellent float fishing and canoeing opportunities. However, allow yourself plenty of time . . . the trip could take all day.

FISHING THE PESHTIGO RIVER TRAIL



WETLAND HABITATS OF THE LOWER PESHTIGO RIVER

The Lower Peshtigo River wetlands differ from inland wetlands because they are affected by changes in Lake Michigan's water levels. As the water levels fall, the marsh, meadow, and swamp communities expand towards the lake. As water levels rise, these communities retreat landward. The changing water levels and plant communities make coastal wetlands very dynamic ecosystems. This site contains the most diverse and least disturbed wetland complex on the west shore of Green Bay.

Emergent marsh: Here water is usually present all the time, though usually less than five feet deep. It is dominated by non-woody plants that have their roots under water but grow and flower above water. They usually spread when water levels are low or the soil is exposed. Plants that occur in the marsh include cattails, bulrush, and pickerelweed. Some wild rice is also still present in the Peshtigo River marshes.

Sedge meadow: This is a type of wet meadow, which serves as a transition zone between aquatic communities and uplands. Wet meadows often contain species from both wetter marsh and drier upland communities. Their soils are saturated, with standing water present only during floods and snowmelt. Sedge meadows grow on peat or muck soils and are dominated by sedges. Some other plants found here might include spike rushes, bulrushes, nutgrasses, Canada bluejoint grass, and true rushes. Wildflowers here include swamp milkweed and joe-pye weed. However, they are scattered being in close competition with the sedges for sunlight and nutrients.

Shrub-carr: Also known as shrub swamp, these sites occur along slow-moving streams and in flood plains. Swamps, wetlands dominated by woody plants, have highly organic saturated soils, with standing water occurring certain times of the year. They are often flooded from nearby rivers and streams. Sometimes, they are covered by many feet of slowly moving or standing water. Plant communities in shrub-carrs are usually dominated by willows, red-osier dogwood and alder. Shrub-carrs also support some of the forbs, grasses, and sedges of the meadow communities.

Floodplain forest: These wetlands are dominated by mature, deciduous hardwood trees growing on soils deposited by rivers. They generally occur in former oxbows, backwaters, and river depressions. Floodplain forests are very diverse plant and animal communities because they support many layers of vegetation including non-woody plants, shrubs, and trees. Dominant hardwoods in the Peshtigo River bottomlands include silver maple, green ash, red maple, Eastern cottonwood, and American elm. Swamp white oak and hackberry are less common but can be found. A common shrub found along the river is prickly ash. The ground layer frequently includes jewelweed and nettles. Many bird species, including wood ducks, barred owls, herons, egrets and different kinds of songbirds, use these areas. Amphibians and other small aquatic critters live in the pools that form here. During high water periods, these forests provide floodwater storage and habitat for fish.

1 Menominee Fish Weir

At this site, it is thought that Menominee Indians placed rocks across the river channel as a dam or weir to harvest fish. They may have also used brush or logs to further restrict fish passage upstream.

2 Oxbow

To see this feature in late summer and fall you will need to stop along the right bank and walk up along the side channel, which may or may not have water in it. In the spring, you may be able to paddle into it. What you are looking at is a former river channel now changing into an oxbow lake, a natural feature of rivers. As with most rivers, the Lower Peshtigo constantly changes course over time, always following the path of least resistance. It erodes its shoreline on the outside curves and deposits the sediment on the inside curves, making long meanders, or loops, in the channel. This oxbow began forming when the upper end of this river loop was severed from the main flow by movement of sediment. Eventually both ends of the loop will be blocked by sand and other sediment dropped by the main current, leaving a crescent shaped "lake" behind. When an oxbow is cut off from the river, it immediately begins changing. Sediment carried in from seasonal flooding builds up, and the old loop becomes shallower and relatively flat-bottomed. Water-tolerant plants take root along the edges. In dry years, some shallow oxbows dry up. Allowing plants to gain a foothold and encroach still farther into the lake. This is the natural process in the death of a river channel. The process may take 500 years or more, but left undisturbed, all oxbows eventually silt in and turn into a wetland forest. Much of the surrounding forest here grew up out of old oxbows.

3 High Banks-Bloch Oxbow State Natural Area

These towering sand banks and the seric (dry) forests and grasslands that top them are part of the Bloch Oxbow State Natural Area. This is just one type of natural community located within the natural area's 614 acres designated in 1990. Once farm fields, this area now holds Hill's oak, red oak, white oak, bigtooth aspen, white pine, red pine, and jack pine. Widely scattered, old charred stumps evident in the area are reminders of fires of long ago. Bank slumping here along the river exposed another historical marker—an American bison skeleton dated at 2000-years old. The natural area is critical habitat for several sensitive bird species including bald eagle, red-shouldered hawk and osprey. Another bird, the bank swallow, uses these sand banks for nesting habitat. Bank swallows are small birds with pointed wings, brown-backs and mostly white breasts with a dark breast band. These graceful flyers are insect eaters, and they get their fill here. They live in large colonies that can reach up to several hundred nests. Both mates can help to excavate their tunnel. You would think a nest such as this is nearly predator-proof. However, the occasional badger hole in the fields directly above the colony tells a different story. Nature has its way of keeping the cycle of life going.

4 Dredged Passage

You have reached the point where the landscape transforms from forest to marsh. The terrain flattens and the river current slows. The shelter of the trees and high banks is replaced by a wide-open sky, grasses waving in the wind and rushes or pickerel weed emerging from the water. This marsh provides food, water, shelter, and space for many water birds including ducks, geese, rails, herons, egrets, terns, pelicans and songbirds. Raptors such as the osprey, bald eagle and northern harrier fly over in search of prey. Furbearers here include muskrat and mink. The terrific fish-spawning habitat helps to sustain Lake Michigan fish populations, most notably the northern pike. This marsh is one of several natural communities that make up the 6,900 acres of wetland here. With that much undeveloped land the Lower Peshtigo River is considered the most diverse and undisturbed wetland area on Greedy Bay, possibly on all of Lake Michigan.

This section of river also has a story to tell from a time when resource preservation and conservation were not popular ideas, the logging days. From when the first lumber mill on the river was built in 1838 to when the last log drive occurred here in 1913, this river was a major highway for the logging industry. In the early years, logs were floated out of northern forests to the mill at Peshtigo where they were sawed into lumber. The lumber was then floated on rafts to the mouth of the river and loaded onto cargo vessels for transport to Chicago. In 1856, William B. Ogden bought the two lumber mills in Peshtigo and called his business the Peshtigo Company. In 1867, he built a steam-powered mill at the mouth of the river. Logs were then floated all the way to Peshtigo Harbor. This long, straight stretch of the river you are now traveling was dredged by the Peshtigo Company to sort logs heading for the mill at the harbor. Logs belonging to other companies were measured and tallied separately in order to charge them for driving and sorting. The original channel, still navigable, splits off to the right and runs alongside this one, coming together again after about 3/4 of a mile.

5 Osprey Vista

Look for two man-made platforms in the distance. These osprey nesting platforms were placed in the marsh in the early 1990's. An osprey is a large bird of prey that plunges feet first into water to catch fish, its main source of food. It resembles a bald eagle, only smaller with long white legs and a brown check patch. The platforms were built here to increase osprey breeding in the area. In the 60's and 70's it was one of the predator bird species in trouble due to the effects of certain pesticides such as DDT. When these pesticides were banned in the U.S. in 1972, distressed wildlife still needed help to make a comeback. Over the years, improved habitat and nesting structures have helped the osprey move up from endangered to threatened status in Wisconsin. The platforms here have been used regularly since installed, sometimes by two pairs of osprey.

6 Sorting Gaps

These short canals to your right were dredged in the days of the Peshtigo Harbor lumber mill. These sorting gaps were used to measure and tally logs before entering the mill. Logs from other companies were sorted out and made into rafts to be transported elsewhere for milling.

7 The Big Island

You are now floating through what was once the settlement of Peshtigo Harbor, which existed from 1867 to 1897. A population of 500 lived and worked here, all somehow connected to the lumber mill at the river's mouth. To your left is what was called the Big Island, and the land on your right was known as the Little Island. The simple homes of many of the mill workers were built on these two pieces of marshland. Like most buildings in this village, the homes were built on blocks set upon sawmill refuse such as sawdust, edgings and slabs. The islands were joined with the main land by bridges.

As the river cuts away the bank of the Big Island, it reveals the many layers of a road. This was the only road leading in and out of Peshtigo Harbor in its day. Heading north, it crossed over a half mile of marsh until it reached the woods where it connected with what is now County Road BB. It was originally made with sawdust from the mill. Although there probably isn't any sawdust left today, you can still see the layers of logs, gravel, and asphalt used over time to resurface and raise the road from the marsh. As you may have guessed, this road is no longer in use.

8 Peshtigo Harbor Mill Stie

The harbor mill was one of the largest on Lake Michigan in its day. It was powered by two steam engines that ran on sawdust and dried wood slabs leftover from the milling process. An average of 225,000 feet of lumber per day was put out during a twelve-hour shift. Just south of the mill, a slip was dug in from the river. It held barges that were being loaded with lumber. As soon as the lumber was cut, rollers ran it out to the mill and on to a barge for shipment to the company's yard in Chicago. Today the boat landing is located in this slip.

9 Dock Pilings

These pilings once supported the harbor's west dock. They are the few remaining relics here. The dock started at the mouth of the river and extended 1,500 feet out into the deep water of the bay. It was used to transfer lumber sawed at the Peshtigo mill from the railway cars onto barges for shipment to the company's lumberyard in Chicago. The train would come out onto the dock to make unloading as easy as possible. A shed with open sides covered the tracks to protect the men loading the barges from the harsh sun and rain while letting the cool bay breezes pass through. Along with the train tracks, the harbor lighthouse, the dock office, two warehouses, and a barn were located on this 100-foot wide dock. Another dock identical in size was located on the east side of the river, across a 250-foot channel. Together, these docks provided a deep and protected harbor for vessels.

10 The Village

This sandy strip of land that separates the marsh from the bay was the main part of the village of Peshtigo Harbor. Much of the buildable land is now private and still has houses and people living on it today. In the old days, this waterfront property was where the larger houses of the mill and harbor "elite" lived. Residences of the superintendent, harbormaster, timekeeper, head saw filer, first engineer, second engineer, plus the store and railway turntable were located here. The railway tracks passed through 50 feet to the north of these buildings. On man-made land north of the tracks stood the boarding house, schoolhouses, barns, the icehouse, and several residences.



In 1895 these were the homes of laborers at Peshtigo Harbor, on the "Big" island.



City of Peshtigo East Side Boat Landing

This is the beginning of the river trail and the easiest place to put in. To get here from Highway 41 in Peshtigo, take County Road B (a.k.a. East Front Street) south. You will soon see a sign and driveway on your right. As you launch your boat, keep in mind not only the people who have traveled this path before you, but those who will also come after you. Please take nothing but photos and leave nothing but footprints.

Mueller Landing (Approx. 1hr 10min)

Land here if you are looking for a brief trip on the water. This is a rustic take-out site for canoes and kayaks with a short portage to the parking area. To get there by land: From Highway 41 in Peshtigo, take County Road B (a.k.a. East Front Street South). After a few miles, turn right onto County Road BB. Watch for Woodridge Drive on your left, but take the driveway across the road to the right. A parking area is located along this drive. To get there by water: Look for a marked landing site on the left side of the river. A small cabin is nearby.

Rifle Range Rest Stop (Approx. 1hr 45min)

This is roughly the halfway point of the river trail. Land here if you need to rest before the last stage of your trip. Please be aware that you are near a rifle range. At this time, it is not recommended to take out or put in here. To get there by water: Look for a marked landing site on the right side of the river.

BB Boat Landing (Approx. 3hr 10min)

This landing is a nice option if you want to see some of the marsh, but don't want to fight the wind all the way to the end. It also could be the starting point for a very short trip to just see the marsh and harbor area on a calm day. To get there by land: From Highway 41 in Peshtigo, take County Road B (a.k.a. East Front Street) south. After a few miles, turn right onto County Road BB. Follow this road about 4.5 miles and look for a small brown boat landing sign on the right. To get there by water: Look for a developed boat landing on the left side of the river.

Harbor Road Boat Landing (Approx. 3hr 30min)

This is the last landing along the Peshtigo River Trail. Canoes should stop here to avoid rough waters and strong winds on the bay. Site #9 can be seen from land. Only kayaks are encouraged to venture out onto the bay to see sites #9 and #10. To get there by land: From Highway 41 in Peshtigo, take West Front Street (a.k.a. Hale Road) south. After a few miles, turn left onto Harbor Road. The landing is at the very end of Harbor Road. To get there by water: Look for a channel on the right side of the river near the harbor mill site. The landing is found a few yards up that channel.

Look around . . . Take time to notice things small and ordinary. You may discover something surprising and fantastic.

Birds of the River

As you float through the forest, you will hear more birds than you will see. However, if you are watchful, some can be spotted along the shore. One that is easy to see here is the belted kingfisher. A blue-gray color covers its back and oversized crested head. Both males and females have white breasts with a blue-gray band, but females have a rusty-colored band as well. As its name implies, this bird eats fish. It hovers over the water waiting for the right moment, and then plunges down to catch one in its extra-large bill. You will surely hear its loud rattling call when it flies along the river. Where there are houses along the river, you may witness a different group of birds more commonly found in urban areas. In the summer, listen for the eastern phoebe with its loud repetitive *phoe-be, phoe-be* call. Follow the source of the song and you will find a small gray-brown bird with a white throat and breast sitting on an exposed branch, twitching its tail, about to snatch up an insect. The phoebe makes its nest under the eaves of buildings. For a list of more birds found along the river, turn to the back of this map.

Sandbars

If the water isn't too high, you will start to notice large sandbars on either side of the river. These not only make excellent resting spots, but are also great places to get close-up views of wild flowers, frogs, and animal tracks. Wildlife, including deer, raccoon, herons, and spotted sandpipers use these sandy sites for easy access to water and food. Use a field guide to gain a true learning experience here. (when landing, please check map to make sure you are not on private property.)

Snags

This river happens to be a favorite local fishing spot for smallmouth bass and northern pike. The reason? A quick look along the shores gives you a clue. You may have noticed all the dead trees lying in the water. These snags occur naturally, but on a developed river or lake they would usually be pulled out of the water and "cleaned up". Here they are left for habitat. Many aquatic insects live on or in submerged wood. Schools of minnows and panfish suspend among the tangled branches looking for an insect meal and a place to hide. The bass and pike, ambush predators, wait in their shady hideouts beneath fallen logs for prey to swim into view. For pike that includes fish, frogs, small ducks, muskrat and anything else they can fit in their mouths. For the bass, crayfish, frogs, large insects and fish are on the menu.

Striders and Gliders

You may have noticed a few insects along this river . . . Okay, a lot of insects. I'm sure you are all too familiar with the ones that bite and annoy the heck out of us, like mosquitoes and deerflies. However, many others also live in or near the water that do not harm us and are quite remarkable. If you take a close look at the surface of the water, you may spot two intriguing insects. One looks like a small spider that walks on the water. Not a spider at all, the water strider has six legs and tiny hairs on each to keep it from breaking through the water's surface. It spends its whole life on top of the water waiting to eat aquatic insects that come up for air. The other that you might see gliding across the water is a whirligig beetle. Its name comes from the way it zips around the surface of quiet waters in wild patterns. Searching for dead plants and animals to scavenge, it uses its eyes located both above and below the water's surface. All insects are an important link in the food web of this natural community. They are the main food source for many birds, fish, frogs, bats, and even other insects. Insects are a sign of a healthy ecosystem. Whether they are annoying or not, they do serve a purpose.



