

Series
Nature from the Seat of a Bike
by Janie O'Connor
janieoc@Q.com
651 481 3152

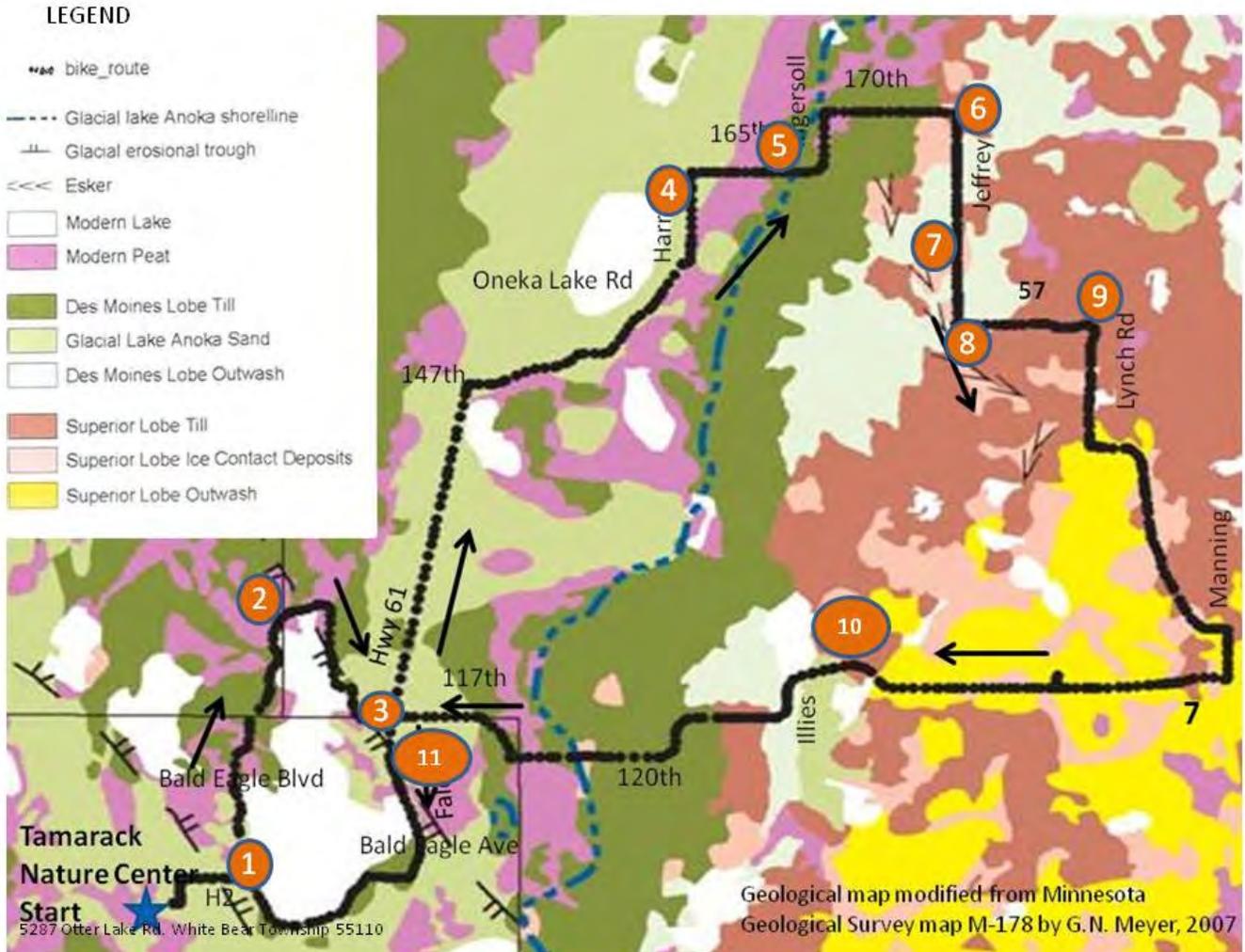
Over the River and Through the Moraine

Theme: Noticing ancient glacial formations and influence on land forms, vegetation and wildlife gives us a greater appreciation of our surroundings

Created by Janie O'Connor
Volunteer Master Naturalist - Spring 2010

Route Map: (Overlying a Geologic Map)

30 miles of glacial sediments, wetlands, prairie, and rolling hills.



Over the River and Through the Moraine

RIDE GUIDE

Mile	Turn	Street
	Start	Tamarack Nature Center Set OD to 0 at tar path - north end of parking lot. Exit main drive way.
0.0	Left	Otter Lake Road
0.2	Right	Co. Rd. H2
0.7	Left	Bald Eagle Ave. Stop 1 (Refer to mini booklet or Ride Guide)
2.9 3.5 3.6 - 4.5	Straight Straight Straight	Bald Eagle Ave Stop 2 UP AHEAD (Refer to mini booklet or Ride Guide) UP AHEAD
4.7	Left	Hwy 61 Stop 3
7.6	Right	147th St.
7.8	Straight	Oneka Lake Blvd
9.7	Left	Harrow Ave N.
10.4	Straight	End of Harrow Ave N. Stop 4
10.5	Right	165th St N
10.5	Straight	165 th St. N Stop 5
11.4	Left	Ingersoll St
11.9	Right	170th St.
12.9	Right	Jeffrey St. Stop 6
14.5	Straight	Jeffrey St Stop 7
14.6	Left	Co. Rd 57 Stop 8
15.3	Straight	Co. Rd 57 Stop 9 UP AHEAD MILE 17.4 UP AHEAD MILE 19.2
16.6	Left	Lynch Rd
18.7	Right	Manning Trail
19.2	Right	Co. Rd. 7
22.2	Straight	Co. Rd. 7 Stop 10 UPAHEAD mile 23 -24
25.1	Right	Portland Ave
26.1	Straight	Cross Hwy 61 Stop 11
26.2	Left	Falcon Ave. N
27.6	Right	Buffalo St
28.5	left	W. Bald Eagle Ave
29.2	Left	Co. Rd H2
29.7	Left	Otter Lake Rd
29.9	Right	Tamarack Nature Center END

Intro:

Start (and end) at Tamarack Nature Center, 5287 Otter Lake Rd, White Bear Township 55110. Ride into the parking lot and look for the tar path on the north side of the lot - that leads to the visitor center. Stop at the path and set your odometer to 0. Now - get ready to experience some beautiful and interesting country that you will see with "new eyes." Travel over the deposits of two continental glacial formations, the Des Moines and the Superior lobe; dating from 10,000 - 20,000 years ago. The soils created or left by these formations provide the substance for plants and animals that thrive in this climate. Now ride out of the parking lot, turn left on Otter Lake Road and follow the queue sheet.

1 Mile .7 Bald Eagle Lake (Bald Eagle Ave. and County Road H2)

A 1000 acre lake created by a large block of glacial ice (A kettle lake)



Imagine the large depression that was left in the ground when the ice block melted and then later filled with water forming Bald Eagle Lake. Vegetation and eventually wild life that call this place home resulted from soil deposits left by glacial debris. Soil types around the lake vary but contain, on the west side, Des Moines lobe till - an accumulation of clay, sand, pebbles, and boulders, and on the east side you will notice the different in vegetation due to the deposits of

sand from Glacial Lake Anoka. Listen for the call of red wing blackbirds in the lowland marsh area and thrushes in the big trees on the east side.

NEXT STOP MILE 2.9

2 Mile 2.9- Osprey pole (Bald Eagle Ave. N)

Wishfully created but never used osprey nest



Osprey, also called fish hawk, build nests like the one in picture, but in this case there was human help. The long pole and the sticks on the nest were put there by humans to entice nesting - but an osprey has never used it. As you pass by you could be the first one to actually see an osprey attempt to call this place home. Watch for a large bird with a hooked beak, sharp talons, excellent vision with a fish in its mouth.

Wetlands along here are part of a greater whole called the Rice Creek chain of lakes. Wetlands and the neighboring highlands support wildlife like: deer, fox, muskrat, bobcat and pileated woodpeckers. Look for wildflowers including goldenrod, purple asters, Joe-Pye weed and milkweed. **While you're stopped, go to next paragraph UP AHEAD.**

UP AHEAD at mile 3.5 Little white bridge over creek connecting two lakes



Dangerous to stop here- If you lost a canoe paddle in Bald Eagle Lake it could float on Clearwater Creek all the way to Peltier Lake, during high water. The Rice Creek drainage is a fairly urban drainage covering most of northern Ramsey and Washington County and southern Anoka County. Development is making headway in that area with possible impact to the water shed. What we do in our yards

and what the farmers do north of Hugo all affect the water shed. If you can check the route map you will notice the purple color here indicating the presence of organic sediment including peat as well as shallow lakes and marshes that were a part of the glacial foot print in this area. **READ ON:**

UP AHEAD at mile 3.6 - 4.5 Watch out for acorns on road (122nd Street N.)

Along this stretch, you will notice some large oak trees. In the fall, the acorns provide food for a variety of small animals including insects, squirrels, turkeys and wood ducks. Oaks usually have alternate years with little or no acorn production, then an abundant production. An acorn crop is called "mast" and this phenomenon is called mast - fruiting.

NEXT STOP MILE 4.7

3. Mile 4.7: Hwy 61 and 120 street (Looking north up Hwy 61)



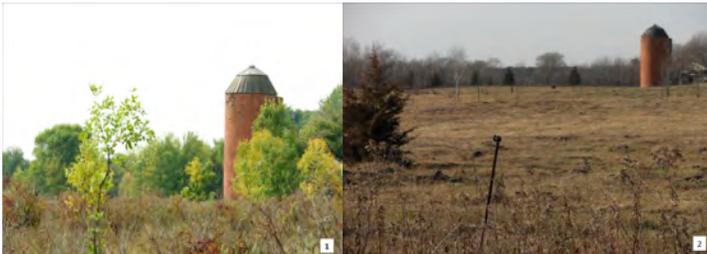
Ancient Lake Anoka becomes hwy 61

About 10 - 20 thousand years ago, this area was under water and is known as ancient Lake Anoka. On the route map on the first page, you will notice a continuation of the light green color -same as along the east side of the lake. You can expect to see many areas of wetlands. Look for prairie remnants along the railroad tracks. Old railroad track beds preserve little bits and pieces of prairie plants because the rail bed has not been disturbed for a long time.. As you ride

this section of road you will see little bluestem, big bluestem, and Indian grass. Depending on the time of year, you can find remnant patches of prairie wild flowers.

NEXT STOP MILE 10.4

4. Mile 10.4 (North end of Harrow) Old field in succession or new pasture?



Just before this road ends at a T, look left and you will see a field and an old brick silo. In photo number 1, taken August 2009, you notice an old pasture field that has started the succession process - on its way to becoming something else. Non-native grasses, and scattered ash trees have managed

to survive the deer browse, getting established where cattle once grazed. If the trees were allowed to get big enough, they would start to shade out the grass and there would be more trees emerging over the next 100 - 200 years. But in photo number 2 taken in November 2009, after cattle were reintroduced into the field, you will see the effects of their grazing - turning this field again into a grass pasture. What's there now when you ride past? What's next?

NEXT STOP MILE 10.5

5. Mile 10.5 (165th Street.) **Movin' on up - crossing glacial Des Moines onto Superior lobe**



When you are riding west to east on the northern-most part of the bike route, the terrain steepens and you climb a (not too steep) hill. That hill is part of the St. Croix moraine which marks the boundary of the Superior Lobe of ice. It was also an eastern shoreline of glacial Lake Anoka. Looking left you may spot a small falcon, - American Kestrel, hunting for small rodents in the open fields. The American Kestrel is the smallest falcon and can hover in the air "like a helicopter" over its prey and then swoop down for the meal. A young

Blanding's turtle (threatened) was spotted here also - hope he got across the road before car, or hawk ended his career. Looking to your right you will notice a long, deep slough; and the shoreline of ancient Lake Anoka. Soil here is black from the decay of organic sediment known as peat. Amphibians love this terrain and the springtime chorus is coming from common grey frogs, treefrogs, American toads, and near the open water, northern leopard frogs. Vegetation in this area includes Joe-Pye weed, goldenrod, sedges and smartweed around the edges of the wetland. In late summer, smartweed (deep pink) can be seen along much of this route. Your great grandmother may have used it as a seasoning.

NEXT STOP MILE 12.9

6. Mile 12.9: **Oak Savanna** (Jeffrey Street - corner of Jeffrey and 170th Street)



Previously home to bison and elk

This oak savanna on your left, probably provided "home on the range" for bison and elk during pre-settlement times - about 150 years ago. On the geological map on page one, you will notice the color change to pink, indicating Superior Lobe, which contains sandy well drained soils suitable for this tree community. Notice how healthy these trees look. Their large limbs have had a chance to spread out due to un-crowded conditions. The essential character

of an oak savanna is the presence of open-grown oaks as well as grasses. This environment helps to support the animal community including coyote, fox, eagles, turkey, turkey vultures, red headed woodpeckers as well as raccoon and opossums.

NEXT STOP MILE 14.5

7. Mile 14.5: (Jeffery Street.) **View from an esker - location-location-location**



A narrow ridge of land to your right is an esker with houses built on it. Eskers were formed when meltwater from a glacier flowed in tunnels beneath the glacier. As the flow of water diminished, the sediment in the water was deposited and filled the tunnel. When the glacier melted completely, the sediment filling the tunnel was exposed and appears as a long, sinuous ridge. Typically only scattered segments of eskers are preserved. You might vote for this location as highly desirable for your

next home.

NEXT STOP MILE 14.6

8. Mile 14.6 (Jeffery Street at County Road 57) **Game Farm: Where the prey and the predator play**



At this T in the road, experience the beautiful view and more eskers as you look south on the horizon. (Jeffery and Co Rd. 57) Sloping landscape and old river bank hills are typical of this glacial outwash area. (light pink on map) and you will start to see kettle lakes; resulting from remnant blocks of glacial ice that were partially to wholly buried by glacial outwash. Also located here is a 537 acre game farm. Keep

your eyes open for pheasant, chuckar (Partridge) and quail. As you ride, look to the sky for frequent sighting of hawks, a natural predator of these game birds. Locals also report seeing turkey vultures, deer, grouse, and bear. Bear populations have been moving closer and closer to the metro suburbs and there are resident bear populations now in northern Washington County.

NEXT STOP MILE 15.3

9. Mile 15.3 to 15.7 (County Road. 57) **Rolling grasslands: Superior lobe till creates picturesque pastures**



Look to your left and you will see rolling hills and pasture. Imagine the thrill of this ride if the road had been built over there! This landscape was probably all forested (probably oak and basswood) at one time. What you see now may be the consequence of human and cattle disturbances.. Right now, it's pasture so it's maintained by livestock. You could see bobolinks and meadowlarks here and maybe a

grassland sparrow. Picturesque, large, open, pristine spaces like this can have a calming effect on bikers and all travelers. While you're stopped, go to the next paragraph, **UP AHEAD**

UP AHEAD: Mile 17.4 In the next two miles see if you can spot large boulders in the fields left by glacial action. At mile 17.4, you might see a sign in farm yard: "boulders for sale"

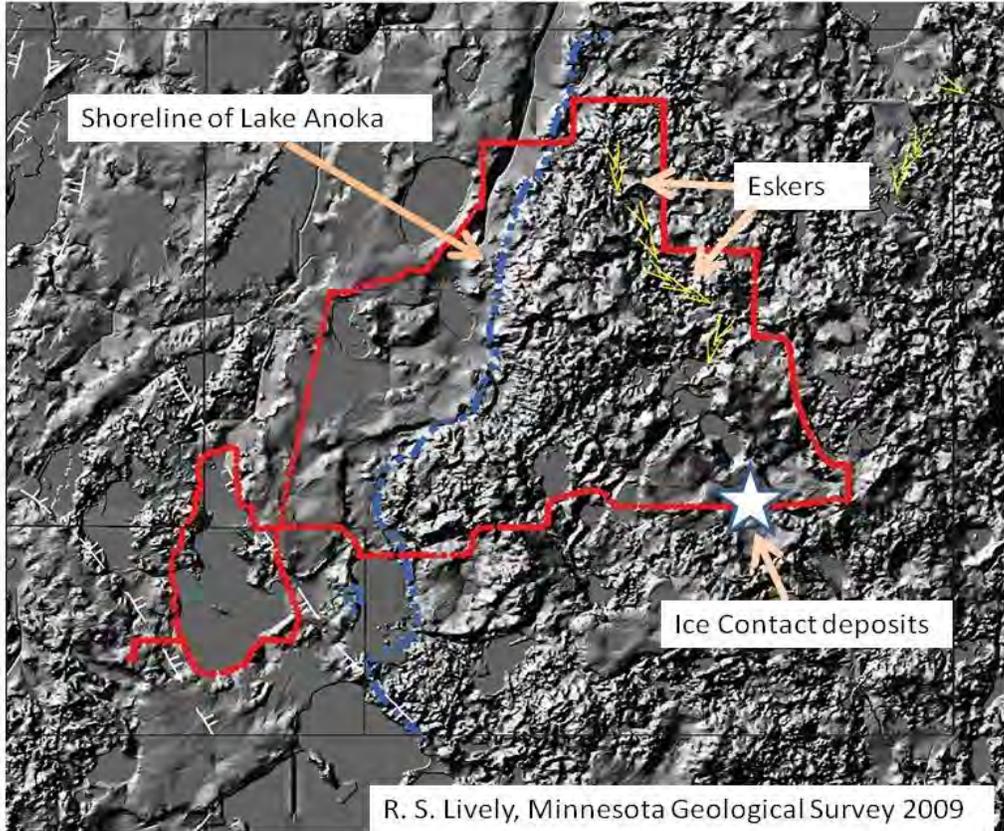
READ ON:

UP AHEAD: Mile 19.2

In this southeastern part of the bike route you will cross ice-contact deposits (pink on the map) of the Superior Lobe. When the glacial ice melts, deposits from on top of the ice collapse or flow off. These are usually seen as flat-topped hills or ridges on the landscape.

Some can be recognized on the shaded-relief model below. You will also notice abundant farm fields in this stretch. Perhaps some have been tiled (drained of water), changing the landscape.

Relief Map



NEXT STOP MILE 22.2

Don't stop too close to hill

10. Mile 22.2 Mile (County Road 7 also Illies) *Sunset Lake*

What goes up must come down



Immediately after *Sunset Lake* appears on your right, you will begin a short but steep climb. Under the road surface and invisible to you probably lies glacial outwash. When glaciers melt, the stream of water issuing for the front of the glacier meanders across the landscape and deposits a broad sheet of sand, gravel and silt. You will soon be leaving the Superior Lobe of the glacier and heading back to down to the flatter plains and wetlands typical of the Des Moines Lobe. Hopefully, you will enjoy the long and picturesque

descent as you roll down the Superior Lobe. While you're stopped go to the next paragraph

UPAHEAD Mile 23 - 24: Back on the flatter plain, the landscape now contains scattered marsh and lowlands. Peat, an organic sediment, tends to be in isolated lowlands including the area know as ancient Lake Anoka. In this area, most wetlands are treeless. Aquatic mammals like muskrats and aquatic birds including great blue herons call this home. At mile 24.5, if you look left, you will see a good example of an extended wetland.
NEXT STOP MILE 26.1

Cross Hwy 61 and turn left on Falcon Avenue.

11. Mile 26.1 (Corner of Falcon Avenue N and 120th Street.)
Benson Prairie Restoration - Return to pre-settlement days



On the southwest corner of this intersection, you are looking at a restored 48-acre mesic (moist but not wet) prairie planted in 2004. It had been an agricultural field up to the early 1970's and old fields since then. It will be managed to stay prairie. Over time the diversity of plants will be increased, and the prairie birds will return. The woods around the perimeter of the prairie will be managed in a way to provide a transition habitat for wildlife. Most of the native grasslands in Ramsey County have been lost to

development. Restorations like this allow people to experience a prairie by using the mowed trails to access the site. The area is attracting more birders to the area. Highlights from the last couple of years include sightings of grassland loving birds; Dickcissels and LeConte's sparrow.

Credits

Janie O'Connor
Master Naturalist
651 481 3152

Dale Setterholm:
Associate Director
Minnesota Geological Survey

Howard Hobbs
Minnesota Geological Survey

John Moriarty
Natural Resources Specialist
Ramsey County Park and Recreation

Anna Newton
Naturalist
Tamarack Nature Center

Miss Jiraporn Teampanpong
Photographer and Naturalist
PhD student
Conservation Biology Graduate Program
University of Minnesota, Twin Cities

Miss Worata Klinsawat
Photographer and Naturalist
PhD student
Conservation Biology Graduate Program

Master Naturalist team mate
Jim Colten

Doug Neldson
Member Twin City Bike Club

