ILLINOIS STATE ACADEMY OF SCIENCE
GEOLOGICAL SCIENCE FIELD TRIP

GUIDE LEAFLET

BLOOMINGTON-NORMAL AREA

May 4, 1957

McLean County

Danvers, LeRoy, McLean,
and Normal Quadrangles

LEADERS

George E. Ekblaw
George M. Wilson

Guide leaflet and map prepared by
ILLINOIS STATE GEOLOGICAL SURVEY, URBANA

Guide Leaflet No. 57

HOST: Illinois State Normal University
Illinois State Academy of Science

Geology Field Trip Itinerary

Bloomington-Normal Area

<table>
<thead>
<tr>
<th>Interval</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assembly at North Hall, Illinois State Normal University.</td>
</tr>
<tr>
<td>0.0</td>
<td>Intersection of Mulberry and University streets. Head south on University Street.</td>
</tr>
<tr>
<td>0.5</td>
<td>0.5 Stop. Bear right - do not cross railroad.</td>
</tr>
<tr>
<td>0.1</td>
<td>0.6 Traffic light - intersection of Main and Hovey streets. Straight ahead (west) on Hovey Street.</td>
</tr>
<tr>
<td>0.3</td>
<td>0.9 Stop. Adelaide Street. Straight ahead.</td>
</tr>
<tr>
<td>0.3</td>
<td>1.2 Valley-train of glacial outwash along Sugar Creek. Gravel pits to south (left).</td>
</tr>
<tr>
<td>1.1</td>
<td>2.3 Stop I. Exposure of Bloomington Till along east side of U.S. Highway No. 150, just north of Hovey Street. Contact of till and overlying loess is irregular.</td>
</tr>
</tbody>
</table>

Like many other things, rocks and minerals suffer changes when they are exposed to the weather. Although these changes are relatively slow, they become evident in earth deposits that are not disturbed over long periods of time and develop what is known as a weathering or soil profile in the surficial part of such deposits.

Following the practice established about 30 years ago by the Russian, Glinka, soil scientists usually consider that the soil or weathering profile consists of 3 zones, designated A, B, and C from top down. The A zone is the "soil" zone, which is normally black or gray in color. The B zone is the "subsoil" zone, and the C zone is the "unaltered parent material."

The zonal effect results from the fact that the four principal processes which effect soil weathering all progress with the downward movement of groundwater but at different rates. These processes listed in order according to their rate of progress, beginning with the most rapid, are (1) oxidation, (2) leaching of carbonates, (3) decomposition of more resistant minerals, and (4) accumulation of humus.

Consequently, in the A zone, in which the humus material derived from decaying plants has accumulated, the rock minerals are oxidized, leached, and decomposed. In the upper part of the B zone they are oxidized and leached and in the lower part of the B zone they are only oxidized. The oxidation zone is shown by the reddish or yellowish color resulting from the oxidation of iron minerals. The leached zone is determined by the absence of carbonates, as revealed by tests with a solution of hydrochloric acid.
At this stop the soil profile is developed partly on loess and partly on glacial till that includes small deposits of sandy gravel.

On resuming travel, turn right (northwest) on highway.

0.6 2.9 Turn right (east) off highway.
0.7 3.6 Turn left (north).
0.8 4.4 Outer edge of Normal Moraine.
2.3 6.7 Stop 2. Crest of Normal Moraine.

Thousands of years ago most of Illinois, together with most of northern North America, was covered by huge ice-sheets or glaciers. These glaciers expanded from centers in what is now eastern and central Canada. They developed when for some reasons, not yet determined, the annual mean temperatures in the region were somewhat lower than now, so that not all of the snow that fell during the winters was melted during the summers. The snow residues accumulated year after year until they became a sheet of ice so thick that as a result of its weight the lowermost part began to flow outward, carrying with it the soil and rocks on which it rested and over which it moved. The process continued until the glacier extended into our country as far south as the Missouri and Ohio rivers.

At this time the temperatures moderated. The melting of the ice first balanced its accumulation and expansion, so that its margin remained stationary. Later the melting exceeded the accumulation and expansion, and the ice front gradually melted back until the glacier disappeared entirely.

As the glacier melted, all of the soil and rocks which it had picked up as it advanced were released. Some of this material or drift was deposited in place as the ice melted. Such material consists of a thorough mixture of all kinds and sizes of rocks and is known as till. Some of the glacial drift was washed out with the melt-waters. The coarsest outwash material was deposited nearest the ice-front and gradually finer material farther away. The finest clay may have been carried all the way to the ocean. Where the outwash material was spread widely in front of the glacier it forms an outwash-plain; where it was restricted to the river valleys, it forms what are called valley-trains.

Some sand and gravel was also deposited at the edge of or actually within the glacier, by streams of melt-water flowing on, in, or under the glacier. Deposits along the courses of such streams now appear as ridges of gravel and are known as eskers. Deposits made where such streams emerged at the edge of the glacier or emptied into holes in the glacier now appear as more or less conical hills of gravel and are known as kames.

At times, especially in the winters, the outwash-planes and valley-trains were exposed as the melt-waters subsided. The wind picked up silt and fine sand from their surfaces, blew it
across the country, and dropped it to form deposits of what is known as loess. Glacial loess mantles most of Illinois. Near the large river valleys it may be as much as 60 or 80 feet thick. Far from the valleys it may be measured only in inches, if it can be identified at all.

It is now commonly known that there were four major periods of glaciation during the Pleistocene or Great Ice age, (see accompanying table) and that between each pair there was a long interglacial period in which conditions were as they are today. It is also commonly known that during each major glaciation there were a number of retreats and readvances. This was particularly true during the last or Wisconsin glacial stage.

The position of the ice-front at each advance is marked by a ridge of till called a moraine. The moraine represents the accumulation of drift at the ice-margin while the advance and melting were essentially in balance, and when more and more material was being brought to the edge by the advancing ice. When melting exceeded advance, so that the ice-front retreated, the resulting drift deposits form a drift-plain or till-plain, whose surface may be almost level.

This stop is on the top of the Normal Moraine, one of the moraines of Wisconsinan Age. To the southwest may be discerned another moraine, the Bloomington, and between them is the Bloomington Drift-Plain. To the northeast is a third moraine, the Cropsey, and between it and the Normal Moraine lies the Normal Drift-Plain. As shown on the accompanying map of moraines in northeastern Illinois, these are only three of several of Wisconsinan Age.

The surface relief of moraines is generally greater than that of the drift-plains. It is generally referred to as swell-and-swale, but on some moraines it is termed knob-and-kettle topography. Generally the outer slope and edge of the moraines is interrupted by valleys and re-entrant angles marking the courses of glacial rivers. At some places there are gaps in the moraines where subglacial streams presumably carried away most of the drift. Subglacial valleys may be distinguished from valleys developed by erosion in post-glacial time by the fact that morainic topography occurs all the way down to valley slopes.

0.5 7.2 Road intersection. Turn left (west).
0.5 7.7 Sharp jog right and left.
0.6 8.3 Stop. Road intersection. Sharp jog right and left. Continue west.
0.5 8.5 Crest of Normal Moraine. Good view to southwest.
1.5 10.3 T-road intersection. Turn right (north).
0.5 10.8 T-road intersection. Turn left (west). Good view southwesterly across Bloomington Drift-Plain to Bloomington Moraine.
0.4 11.2 Stop. U.S. Highway No. 150. Continue straight ahead on gravel road.

0.6 11.8 Outer edge of Normal Moraine. Bloomington Drift-Plain ahead.

0.7 12.5 Railway crossing. Caution.

3.2 15.7 Stop 3. Loess Deposit.

At this locality the loess at and near the top of the hill is 8 feet and more thick, so that in contrast with Stop 1 it is not entirely leached, and at a few restricted places calcareous loess may be found at the base. The calcareous loess lies on calcareous till, showing that there was no weathering interval between their depositions.

0.1 15.8 Stop. Paved road. Continue straight ahead.

1.5 17.3 Stop. Cross road. Continue straight ahead. From this point for the next several miles observe the changing physiographic situation as a result of increased erosion by tributaries of Mackinaw River.

2.0 19.3 Turn right (north).

0.3 19.6 Note deep gully on west (left) side of road--exposes unweathered gray Bloomington Till.

0.4 20.0 Note "badland" erosion on hillsides.

0.3 20.3 Turn left (west).

0.3 20.6 Turn right (north).

0.4 21.0 Stop 4. Park along road north of bridge. Exposure along south side of Rock Creek east of bridge.

Succession:

<table>
<thead>
<tr>
<th></th>
<th>Thickness</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Ft.</td>
</tr>
<tr>
<td>Wisconsinan</td>
<td></td>
</tr>
<tr>
<td>Till, calcareous, brownish-pink</td>
<td>20+</td>
</tr>
<tr>
<td>Iowan</td>
<td></td>
</tr>
<tr>
<td>Loess, calcareous, bluish gray, with iron-stained streaks and mottling</td>
<td>2</td>
</tr>
<tr>
<td>Farndalian</td>
<td></td>
</tr>
<tr>
<td>Loess, noncalcareous to slightly calcareous in places, brownish gray to yellowish gray; iron-stained joints; contains humus streaks and layers; wood fragments at top</td>
<td>5</td>
</tr>
<tr>
<td>Silt, noncalcareous, dark brown, peaty</td>
<td>10</td>
</tr>
<tr>
<td>Silt, noncalcareous, dark gray, carbonaceous</td>
<td>2</td>
</tr>
<tr>
<td>Sangamonian (on Illinoian)</td>
<td></td>
</tr>
<tr>
<td>Soil, noncalcareous, dark brown, friable (Horizon 1)</td>
<td>1</td>
</tr>
<tr>
<td>Gumbotil, noncalcareous, dark gray, plastic, tough; blocky fracture (Horizon 2)</td>
<td>4</td>
</tr>
<tr>
<td>Till, noncalcareous, yellow (Horizon 3)</td>
<td>7</td>
</tr>
</tbody>
</table>

As listed above, this exposure reveals a succession of
glacial deposits beneath more than 20 feet of till of Wisconsinian Age, of which at least the lower part should be Shelbyville. First, there is a 2-foot layer of gray calcareous loess that is correlated as of Farmdalian Age. This loess was derived by the wind from outwash deposited in Illinois River Valley either from the Farmdale Glacier in Iowa or from the Shelbyville glacial advance in Illinois.

Beneath the Farmdalian Loess there is about 8 feet of loess and silt of Altonian Age. It is distinguished from the Farmdale by its darker and brownish color, by the fact that it is partly leached, and by the abundance of humus, peaty material, and wood fragments. The Altonian Loess and silt are derived from or related to outwash deposited in Illinois River Valley by a glacier of Wisconsinian Age earlier than either the Farmdale or Shelbyville glacial advances.

The mild leaching of the Altonian deposits shows that there was a brief period of weathering between the Altonian and Farmdalian - Shelbyville advances. This in turn is evidence that, between these glaciations there was an interstadial period of significant duration in which the Altonian advance must have receded far if it did not entirely disappear before the Farmdalian and Shelbyville advances.

Below the Altonian deposits there is about 12 feet of Illinoian Till greatly weathered during the succeeding Sangamonian Interglacial Stage. Geologic studies of the soil profiles developed on the older drifts - Illinoian, Kansan, and Nebraskan - reveal that they can be divided into 5 zones, or horizons, instead of the 3 first recognized by Glinka. In order to avoid confusion they have been designated by numbers instead of by letters.

Horizon 1 is the old "soil" or humus zone. Horizon 2 is a dense layer, very gummy and plastic when wet, very hard when dry. Horizon 3 is the leached and oxidized zone, and Horizon 4 is the oxidized but calcareous zone. Horizon 5 is the unaltered parent material.

The development of 5 instead of 3 recognizable zones in the old drifts results from the fact that they are much more weathered. The total thickness of the weathering on the old drifts is much greater than on the Wisconsinan Drift, even where they are overlain by younger drifts. Oxidation, leaching, and decomposition of minerals have all progressed deeper. In addition, another process, the downward transfer of clay minerals derived from the decomposition of other minerals originally in the drifts, has not only left Horizon 1 more silty than it was originally but has made Horizon 2 much denser and more plastic than it was originally. This dense, plastic, "gumbo" horizon is so little developed on Wisconsinan Drift that it is not differentiated.
1.5 23.4 Turn right (east).
0.4 23.8 Stop. U.S. Highway No. 150. Continue east on highway.
0.6 24.4 Pink Bloomington Till on right.
0.6 25.0 Railway crossing.
0.3 25.3 Congerville. Slow.
1.7 27.0 Outer edge of Normal Moraine.
0.8 27.8 Yellowish-buff, stony Normal Till along north side of road. Also good view across Shelbyville Drift-Plain to south.
1.4 29.2 Turn left (east) on good gravel road (Hudson Road).
0.5 29.7 Crest of Normal Moraine.
0.3 30.0 Sharp jogs left and right.
0.5 30.5 Turn right (south).
1.5 32.0 Turn left (east).
3.7 35.7 Jog right and left - continue east.
2.2 37.9 Stop. U.S. Highway No. 51. Turn left (north).
4.2 42.1 Turn right (east) on paved road to Lake Bloomington.
0.3 42.4 Railway crossing.
3.3 45.7 Stop. T-road. Turn left (north).
1.0 46.7 Stop 5. Lake Bloomington spillway. Turn around before parking. This exposure is relatively unique in that at least 4 separate drifts of Wisconsinan Age may be differentiated, one above the other.

Succession:

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Normal Till, clayey, gravelly, buffish gray in upper part, reddish gray in lower third, discontinuous layer of yellow oxidized sand and silt, up to 6 inches thick, about 6 feet above base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interstadial: clay, pink to purple, laminated over-clay, silty, greenish; discontinuous</td>
</tr>
<tr>
<td></td>
<td>Bloomington Till, gravelly, light gray, partly oxidized to brownish gray</td>
</tr>
<tr>
<td></td>
<td>Interstadial: peat and peaty silt, calcareous, fossiliferous with mollusks and wood fragments, discontinuous</td>
</tr>
</tbody>
</table>

Ft. In.
Le Roy Till, clayey, greenish gray

Shelbyville Till, hard, jointed, purplish gray, upper 8 inches slightly leached, humus darkened, and marked by a pavement of pebbles, cobbles, and boulders, all faceted, polished, and striated on top, base not exposed.

The distinct breaks and the interstadial materials deposited between the tills are convincing evidence that (1) after the deposition of each of the lower tills the glacier must have retreated a considerable distance and (2) an appreciable interval of time elapsed before the succeeding glacier advanced over the area.

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Ft.</th>
<th>In.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

0.5 47.2 Turn left (east) off highway, to picnic grounds.
0.2 47.4 Stop 6. Lake Bloomington picnic grounds. After lunch return to public road.
0.2 47.6 Turn left (south).
0.5 48.1 Stop. Continue straight ahead.
0.3 48.4 Turn right (west).
0.5 48.9 T-road. Turn left (east).
0.3 49.2 T-road. Turn right (south).
1.0 50.2 T-road. Turn right (west).
0.5 50.7 T-road. Turn left (south).
1.5 52.2 Stop. County road, paved. Continue straight ahead.
0.8 53.0 Inner edge of Normal Moraine. The Normal Moraine here actually consists of two ridges, separated by a narrow intraglacial valley. Parts of this valley are now occupied by the upper courses of Six-mile and Money Creeks, with an abandoned portion between, extending two miles westerly from Towanda.
0.8 53.8 Crest of inner-ridge of Normal Moraine.
0.8 54.6 This sharp hill and another half a mile west (right) are probably kames.
0.5 55.1 Intraglacial valley.
0.4 55.5 Inner end of subglacial valley through principal Normal Moraine. The route follows this valley for a little more than half a mile.
1.3 56.8 Stop. U.S. Highway No. 66. Caution. Turn right (west) on highway.
Again crossing subglacial channel near point of drainage divide between waters flowing northward through Six-mile Creek and those flowing southward to Sugar Creek.

Y-junction. Bear left (easterly).

Overpass over railway.

Axis of crest of Normal Moraine, but not apparent because of subglacial channel which the route here follows for nearly a mile.

Railway crossing. New General Electric plant to left (east side).


Outer edge of Normal Moraine.


Railway crossing. Caution.

Inner edge of Bloomington Moraine.

Crest of Bloomington Moraine.

Turn right (south) on gravel road.

Gillum. Caution. Jog left and right over unguarded railway crossing.

Outer edge of Bloomington Moraine.

Kickapoo Creek. Valley-train terrace about 10 feet high is conspicuous on the southeast side of the stream.

Stop. County road. Straight ahead.

Stop 7. Exposure of materials comprising terrace: loess on outwash silt on outwash gravel forming valley-train. Lower terrace level is apparent.

The valley of Kickapoo Creek was presumably first a subglacial channel in the Le Roy Moraine, similar to many others that are apparent at the present time but presumably somewhat larger and more significant, possibly deeper. Possibly some outwash of Le Roy Age was deposited.

However, upon the advent of the Bloomington glacial advance, subsequent to the recession of the Le Roy advance, the meltwaters from a considerable part of the Bloomington escaped through Kickapoo Valley, deepening and broadening it, and then outwash from the Bloomington was deposited, partly filling the valley to the level of this terrace, slightly more than 750 feet above mean sea level at this point. The waters draining from the Bloomington also maintained a subglacial channel through it, as a headward extension of Kickapoo Valley.
Similarly, upon the advent of the Normal glacial advance subsequent to the recession of the Bloomington, the meltwaters from a considerable part of the Normal escaped also through Kickapoo Valley, incising a channel in the terrace of Bloomington Outwash, in which channel outwash of Normal Age was deposited to form the lower terrace, hardly more than 10 feet below the Bloomington Terrace.

The coarsest outwash was deposited at the maxima of drainage. As each of the glaciers receded, the outwash deposited at any point along the valley became finer and finer, until it was only silt. Wind-blown loess of later age was then deposited on the terraces.

0.3 70.7 Lower terrace.

0.2 70.9 Stop 8. Exposure of Bloomington outwash lapping up on Le Roy Till along side of valley eroded by Bloomington meltwater, with loess over both. This is also the inner edge of the Le Roy Moraine.

1.4 72.3 Sag between back and principal ridges of Le Roy Moraine.

0.7 73.0 Stop 9. Crest of Le Roy Moraine.

The Le Roy Moraine is a low but broad moraine. East of here it consists of two ridges -- a relatively prominent frontal one and a less prominent, wider ridge on the back slope. West from here the back ridge increases in size and prominence. It trends northwesterly to the vicinity of Shirley, whence it trends southwesterly along the southeast side of Sugar Creek, following what was evidently a re-entrant angle in the ice-front.

A third component ridge of the moraine exists for a short distance in front of the principal ridge also west of here. It diverges from the main ridge northwest of Heyworth and remerges with it south of McLean. (See topographic map of McLean quadrangle.)

0.7 73.7 Outer edge of Le Roy Moraine.

0.9 74.6 Note general level but undulatory surface of Shelbyville Drift-Plain which is now being traversed.

0.9 75.5 Stop. U.S. Highway No. 136. Turn right (west) on highway.

1.6 77.1 Stop 10. Exposures along roadside reveal different soil profiles that develop on the low mounds and in the shallow depressions in the loess-mantled Shelbyville Drift-Plain. The depressions provide the environment in which glei or gleisol accumulates.

2.0 79.1 Heyworth. Slow.

0.4 79.5 Railway crossing. Caution.

0.2 79.7 Stop. U.S. Highway No. 51. Straight ahead.

1.5 81.2 Turn right into field.

Stop 11. Van Horn's gravel pit.
This pit, like many others along Kickapoo Creek, exploits the glacial outwash that was deposited as a valley-train along the stream. The genesis of the deposit is revealed by the general horizontal attitude of the beds and by the size-gradation of the materials, which are not only uniformly graded at any one horizon but decrease in average size from bottom up. Sand, silt, and finally clay comprise the surficial materials.

It may be noted that the gravel occurs at three levels. The lowest level is the alluvial flood-plain of the stream. Above this is a low terrace, and then the terrace in which this pit is located - 12-15 feet above the flood-plain. This terrace appears to represent the top surface of the original valley-train. Subsequent erosion by the stream has reduced parts of it to the lower levels.

What appears to be a still higher terrace level along the sides of the valley is believed to be the original slope of a subglacial channel in the Shelbyville Drift. The valley of Kickapoo Creek was maintained as a subglacial channel through both the Le Roy and Bloomington Moraines. Consequently it served as an escape route for the meltwaters not only from these two but also from the Normal advance. This accounts partly for the abundant outwash deposits now in the valley. Conditions existing at the time these glaciers melted must have been another factor, as outwash from the Bloomington and Normal is abundant in all valleys that served as drains for their meltwaters.

Return to highway. Turn right (west).

0.6 81.8 Low-level terrace on left (south) side, high-level terrace on right (north) side of highway.

2.0 83.8 Turn right (north) on gravel road.

0.2 84.0 Outer edge of extra fore-ridge of Le Roy Moraine.

0.6 84.6 Crest of fore-ridge of Le Roy Moraine.

1.1 85.7 Sag between fore and principal ridges of Le Roy Moraine.

0.9 86.6 Crest of principal ridge of Le Roy Moraine.

0.8 87.4 Stop. Sharp jog right and left. Continue north.

0.4 87.8 Lane leading to Mr. Lafayette Funk's home.

Stop 12. Examination of Mr. Funk's collection of minerals and rocks.

Mr. Funk's generosity in allowing us to include this examination on the trip is greatly appreciated.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Substage</th>
<th>Nature of Deposits</th>
<th>Special Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recent</td>
<td>5,000 yrs.</td>
<td>Recent Soil, lake and river deposits, dunes, peat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valderan</td>
<td>Outwash</td>
<td>Outwash along Mississippi Valley</td>
</tr>
<tr>
<td></td>
<td>11,000 yrs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wisconsin</td>
<td>12,500 yrs.</td>
<td>Peat and alluvium</td>
<td>Ice withdrawal, erosion</td>
</tr>
<tr>
<td></td>
<td>Twocreekan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woodfordian</td>
<td>Drift, loess</td>
<td>Glaciation, building of many moraines as far south as Shelbyville, extensive valley trains, outwash plains, and lakes</td>
</tr>
<tr>
<td></td>
<td>22,000 yrs.</td>
<td>Soil, silt and peat</td>
<td>Ice withdrawal, weathering, and erosion</td>
</tr>
<tr>
<td></td>
<td>Farmdalian</td>
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<tr>
<td></td>
<td>26,000 yrs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Altonian</td>
<td>Drift, loess</td>
<td>Glaciation in northern Illinois, valley trains along major rivers, Winnebago drift</td>
</tr>
<tr>
<td>Sangamonian</td>
<td>50,000 to 70,000 years</td>
<td>Soil, mature profile of weathering, alluvium, peat</td>
<td></td>
</tr>
<tr>
<td>(3rd Interglacial)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinoian</td>
<td>Buffalo Hart</td>
<td>Drift</td>
<td>Glaciers from northeast at maximum reached Mississippi River and nearly to southern tip of Illinois</td>
</tr>
<tr>
<td>(3rd Glacial)</td>
<td>Liman</td>
<td>Drift</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jacksonville</td>
<td>Drift, loess</td>
<td></td>
</tr>
<tr>
<td>Yarmouthian</td>
<td></td>
<td>Soil, mature profile of weathering, alluvium, peat</td>
<td></td>
</tr>
<tr>
<td>(2nd Interglacial)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansan</td>
<td></td>
<td>Drift, loess</td>
<td>Glaciers from northeast and northwest covered much of state</td>
</tr>
<tr>
<td>(2nd Glacial)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aftonian</td>
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<td>Soil, mature profile of weathering, alluvium, peat</td>
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</tr>
<tr>
<td>(1st Interglacial)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraskan</td>
<td></td>
<td>Drift</td>
<td>Glaciers from northwest invaded western Illinois</td>
</tr>
<tr>
<td>(1st Glacial)</td>
<td></td>
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GLACIAL MAP OF NORTHEASTERN ILLINOIS

GEORGE E. EKBLAW

Revised 1960