# National Register of Historic Places Inventory -- Nomination Form

## 1 Name

**Historic**

Morrow Plots

**AND/OR COMMON**

Morrow Plots

## 2 Location

**Street & Number**

northwest corner of Gregory Dr. and Mathews Ave.

**City, Town**

Urbana

**State**

Illinois

**Code**

17

**Congressional District**

021 (second-first)

## 3 Classification

<table>
<thead>
<tr>
<th>Category</th>
<th>Ownership</th>
<th>Status</th>
<th>Present Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>District</td>
<td><strong>Public</strong></td>
<td>Occupied</td>
<td>Agriculture</td>
</tr>
<tr>
<td>Building(s)</td>
<td><strong>Private</strong></td>
<td>Unoccupied</td>
<td>Commercial</td>
</tr>
<tr>
<td>Structure</td>
<td><strong>Both</strong></td>
<td>Work in progress</td>
<td>Educational</td>
</tr>
<tr>
<td>Site</td>
<td><strong>Public Acquisition</strong></td>
<td>Accessible</td>
<td>Entertainment</td>
</tr>
<tr>
<td>Object</td>
<td><strong>In Process</strong></td>
<td>Yes: Restricted</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td><strong>Being Considered</strong></td>
<td>Yes: Unrestricted</td>
<td>Industrial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>Military</td>
</tr>
</tbody>
</table>

## 4 Owner of Property

**Name**

(University of Illinois) R.W. Howell, Head, Dept. of Agronomy, College of Agriculture

**Street & Number**

**City, Town**

Urbana

**State**

Illinois

**Vicinity of**

61801

## 5 Location of Legal Description

**Courthouse, Registry of Deeds, etc.**

Champaign County Courthouse

**Street & Number**

**City, Town**

Urbana

**State**

Illinois

## 6 Representation in Existing Surveys

**Title**

Historic Sites Survey

**Date**

**FEDERAL**

**State**

**COUNTY**

**Local**

**Depository for Survey Records**

Historic Sites Survey

**City, Town**

Washington

**State**

D.C.
There were ten original Morrow Plots, three of which were laid out in 1876 and the rest three years later. They were each \( \frac{1}{4} \) acre in size. In 1903 all but three of the plots were discontinued. The following year each of these was reduced to about \( \frac{1}{5} \) acre and was divided in half, making a total of six \( \frac{1}{10} \)-acre plots. That is how they remain today. The fenced-in area measures 208 x 282 feet.

The plots follow three cropping systems. The two north plots have grown corn continuously since 1876. The two middle plots have been cropped to a corn-oats rotation. Since 1904 catch crops have been seeded in the oats on the southern of these two plots, and plowed down the following spring for corn. Since 1901 the two plots at the south have been cropped to a corn-oats-red clover rotation. Before then, the rotation was corn-corn-oats-meadow-meadow-meadow. Since 1904 one plot of the two in each rotation has received a manure-limestone-phosphorus (MLP) treatment.
STATEMENT OF SIGNIFICANCE

Begun in 1876 and enlarged in 1879, the Morrow Plots at the University of Illinois were the first field experiment plots established by a college in the United States. They were reduced in number from 10 to three in 1904. Of great importance in proving that prairie soil could be depleted by the continuous cropping of corn, they continue to provide data on the effect of crop rotation and the impact of organic and chemical nutrients on plant yields.

History

Prof. Manly Miles of the University of Illinois laid out the first soil experiment plots in 1876. They were named after George E. Morrow, Miles' strongest supporter at the University. Three in number, they were each one-half acre in size. The purpose of the experiment was to prove that the continuous growing of corn would deplete prairie soil and, conversely, that crop rotation would increase plant yields. Three years later Prof. George E. Morrow increased the number of plots to 10.

During the early years, university officials periodically reported the results of experimentation to the State Horticultural Society of Illinois, which in turn made it available to farmers throughout the State. Information concerning the experiment also appeared in the college catalogue, but it was not until 1888 that the university began keeping accurate records of crop yields and that knowledge of the testing became widely known. By 1904 the value of the investigation had become conclusively apparent. It was evident beyond a doubt that the depletion of prairie soil was indeed possible and that crop rotation was an effective method of preventing soil exhaustion.

In 1903, officials reduced the number of experimental plots to three in order to provide space for college expansion. Of the remaining plots, only one dated from 1876. The following year, the plots were reduced about one-fifth of an acre and divided in half to make six plots one-tenth of an acre in size. This arrangement has survived to the present day. Also in 1904, college agronomists broadened the scope of investigation by treating the south half of each of the plots with animal fertilizers and other nutrients.

The Morrow Plots show the comparative value of three kinds of cropping systems. The two northern plots have been planted in corn continuously since 1876, the middle plots have been cropped on a corn and oats rotation since 1879, and the two southern plots have been sown alternately with corn, oats, and red clover since 1901. Among other things, experimentation has demonstrated and/or verified that continuous planting of the same crop lowers the productive power of prairie soil, that crop rotation is an effective preventative of soil exhaustion, and that depleted soil can be regenerated by chemical treatment.
MAJOR BIBLIOGRAPHICAL REFERENCES
(The University of Illinois Agricultural Experiment Station Bulletin is cited as UIB.)

10 GEOGRAPHICAL DATA
ACREAGE OF NOMINATED PROPERTY 1.3 acres
ZONE EASTING NORTHING
A [1, 6] [3, 9, 5] [5, 2, 0] [4, 4, 3, 9] [8, 6, 0] B
C [ ] [ ] [ ] [ ] [ ] D [ ] [ ] [ ] [ ] [ ]
VERBAL BOUNDARY DESCRIPTION
At present there are six 1/10 acre plots in cultivation at the Morrow Plots. The entire fenced-in area consist of 1.319 acres. This rectangular area, 208 x 282 feet, at the northwest corner of Gregory Drive and Matthews Avenue, comprises the landmark site.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES
STATE CODE COUNTY CODE

FORM PREPARED BY
NAME / TITLE
Stephen Lissandrello, Historian, Landmarks Survey Project
ORGANIZATION
Historic Sites Survey, National Park Service
STREET & NUMBER
1100 L Street, N.W.
CITY OR TOWN
Washington
STATE
D.C.

STATE HISTORIC PRESERVATION OFFICER CERTIFICATION
THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:
NATIONAL _____ STATE _____ LOCAL _____
As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

FEDERAL REPRESENTATIVE SIGNATURE
TITLE
DATE

FOR NPS USE ONLY
I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER
DIRECTOR, OFFICE OF ARCHAEOLOGY AND PREHISTORIC PRESERVATION
DATE
ATTEST:
KEEPER OF THE NATIONAL REGISTER
DATE

(NATIONAL HISTORIC LANDMARKS) (NATIONAL HISTORIC LANDMARKS)
Although the University of Illinois was the first to establish field experiment plots in the United States, the knowledge gained there in the early years was not widely disseminated. No accurate records of crop yields were kept until after the establishment of the University of Illinois Agricultural Experiment Station in 1888. By that time many colleges had agricultural experiment stations or were conducting informal experiments of a similar kind. Agronomists at Pennsylvania State College were the first to perform field experiments with fertilizers in 1881. The Jordon Plots, however, were destroyed in 1958. At Sanborn Field, established at the University of Missouri in 1888, similar experiments in crop rotation and soil depletion were performed on a somewhat larger scale. Sanborn Field became a National Historic Landmark in 1965.

Yet the investigations made at the University of Illinois loom large in early agricultural research, especially in the area of prairie soils. Most college texts in agronomy mention the experiments conducted there.


Arthur Harris, "Further Studies on the Permanence of Differences in the Plots of an Experimental Field," *Journal of Agricultural Research* 36 (1928).


U.S. Department of Agriculture, *Soils and Men* (1938)


Interview of Associate Dean Karl E. Gardner of the College of Agriculture; Dr. Fred H. Turner, Chairman of the University of Illinois Centennial; and Professors Larry B. Miller and M. D. Thorne of the Department of Agronomy of the University of Illinois by John D. McDermott, January 10, 1968, Urbana, Illinois.