

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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RECEIVED **AUG 1 1979**

DATE ENTERED

AUG 29 1979

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

Magruder Plots

AND/OR COMMON

2 LOCATION

STREET & NUMBER

Oklahoma State University

___ NOT FOR PUBLICATION

CITY, TOWN

Stillwater

CONGRESSIONAL DISTRICT

006

___ VICINITY OF

STATE

Oklahoma

CODE

40

COUNTY

Payne

CODE

119**3 CLASSIFICATION****CATEGORY** DISTRICT BUILDING(S) STRUCTURE SITE OBJECT**OWNERSHIP** PUBLIC PRIVATE BOTH**PUBLIC ACQUISITION** IN PROCESS BEING CONSIDERED**STATUS** OCCUPIED UNOCCUPIED WORK IN PROGRESS**ACCESSIBLE** YES: RESTRICTED YES: UNRESTRICTED NO**PRESENT USE** AGRICULTURE COMMERCIAL EDUCATIONAL ENTERTAINMENT GOVERNMENT INDUSTRIAL MILITARY MUSEUM PARK PRIVATE RESIDENCE RELIGIOUS SCIENTIFIC TRANSPORTATION OTHER:**4 OWNER OF PROPERTY**

NAME

Oklahoma State University

STREET & NUMBER

CITY, TOWN

Stillwater

___ VICINITY OF

STATE

OK**5 LOCATION OF LEGAL DESCRIPTION**COURTHOUSE,
REGISTRY OF DEEDS, ETC.Office of the County Clerk

STREET & NUMBER

Payne County Courthouse

CITY, TOWN

Stillwater

STATE

OK**6 REPRESENTATION IN EXISTING SURVEYS**

TITLE

Oklahoma Comprehensive Survey

DATE

1978 FEDERAL STATE COUNTY LOCALDEPOSITORY FOR
SURVEY RECORDSOklahoma Historical Society, Preservation Office

CITY, TOWN

Oklahoma City

STATE

OK

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input checked="" type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input checked="" type="checkbox"/> MOVED DATE <u>1947</u>
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Originally planted in the fall of 1892 by A. C. Magruder, first professor of agriculture at Oklahoma A & M (now Oklahoma State University), these plots were established to obtain information on the ability of the soil to continue to produce good yields of wheat without fertilization. Researchers conducted hundreds of experiments comparing various fertilizer treatments with manure applications and without such treatments. The plots became the center for wheat soil research in the region and provided constant data which helped farmers get maximum yield from their arid climates and naturally dry soils.

Between 1893 and 1898 the field was not fertilized and the yield data were taken from the 1.25 acre plot as a unit. The plots were divided in the summer of 1896, and yields were taken separately from the north and south halves to allow measurement of soil variability. Between 1899 and 1929, the south half was fertilized with barnyard manure and north half left unfertilized. No commercial fertilizer was used at all. Just prior to the 1926-1927 seasonal seeding, each of the halves was divided into five plots on which individual yields were taken in 1927, 1928, and 1929. Soil variability was thus determined. Starting in 1930 the ten plots were fertilized variously.

In 1947 university officials decided that the area where the soil plots were located had to be used for space for a new dormitory. That year the soils were moved to the present location. Before the construction of the dormitory, university officials dispatched workers to move carefully the surface and immediate subsurface soils from six of the ten main plots to a location about one mile west on the OSU agronomy farm. The reddish clay subsoil under the new location was similar to the subsoil under the original plot. Dr. Horace J. Harper, agronomist in charge of the plots for 1926 to 1951, described the task of moving the soil as follows:

"The top eight inches of soil was removed with a bulldozer from an area of 100 feet in length near the center of each plot and was piled on each end of that plot. The subsurface soil from 8 to 16 inches was excavated and transferred to prepared trenches dug in a east-west direction on the agronomy farm."

Studies conducted on the site after the move, when compared to similar studies conducted before the soil was tampered with, have shown that moving the plots of soil did not cause much change in their relative crop-producing capacities. No evidence has indicated that the move disturbed the soil or hindered the research value of the area, which continues to be used for its original purpose.

8 SIGNIFICANCE

PERIOD

AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW

<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input checked="" type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input checked="" type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1892 to present

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The Magruder plots have played a significant role in the historical development of agriculture in Oklahoma and nearby areas by providing information relevant to appropriate methods of fertilization for long term wheat production. Agriculture has long been one of the most important economic activities in the area, and has in turn contributed to the formation of the region's culture as we know it today.

The primary objective of the plots throughout the years was to study the effects of continuous wheat production and long term fertilization on soil productivity. Dr. Billy Tucker, agronomist with the Oklahoma Agricultural Experiment Station in charge of the plots since 1957, has said that Oklahoma farmers have benefited significantly by the research conducted on the Magruder Plots. Information concerning the nutrients needed for high crop yields, and to allow continuous production of one crop without crop rotation, has had a great impact on area agriculture.

The importance of the plots is highlighted by the care taken to move the soil when the original location was needed for other purposes. Long term information from these plots was considered crucial to area agriculture, so the difficult and expensive move was undertaken. As a result, the soil plots continue to serve the area's farmers as they have since 1892.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

- Gilmore, F. R. A Historical Study of the Oklahoma Agriculture Experiment Station. (Stillwater: Oklahoma State University, Ed.D. thesis, 1967).
- Harper, E. J. 65 Years of Continuous Wheat. (Stillwater: Oklahoma State Agriculture Experiment Bulletin No. B-531, 1959.)
- Interview: Dr. Billy Tucker, Professor of Agronomy, OSU. (8-8-78)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY under one acre

QUADRANGLE NAME Stillwater North, OK QUADRANGLE SCALE 7.5'

UTM REFERENCES

A	<u>1,4</u>	<u>6,7,2</u>	<u>1,3,0</u>	<u>3,9</u>	<u>9,8</u>	<u>4,2,0</u>	B			
	ZONE	EASTING	NORTHING	ZONE	EASTING	NORTHING				
C							D			
E							F			
G							H			

VERBAL BOUNDARY DESCRIPTION

The Southeast corner of the plot is located 342 feet west of the center of Western Street, and 1,341 feet North of the center of Highway 51. The plot size is 120 feet (E-W) by 145 (N-S), including borders 10 feet wide on each side.

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

STATE	CODE	COUNTY	CODE
N/A			
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE
Joe Stout, Directed by Dr. Annetta L. Cheek

ORGANIZATION
Oklahoma Historic Preservation Survey

STREET & NUMBER
Oklahoma State University

CITY OR TOWN
Stillwater

DATE
9/78

TELEPHONE
405/884-5456

STATE
OK

12 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.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE
Harry L. Deery III

TITLE
Director

DATE
7-13-79

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

John C. Shull
KEEPER OF THE NATIONAL REGISTER

DATE 8-29-79

ATTEST: Beth Grosvenor
CHIEF OF REGISTRATION

DATE 8/28/79