

United States Department of the Interior
National Park Service

For NPS use only

National Register of Historic Places
Inventory—Nomination Form

received

MAY 27 1986
~~MAR 28 1986~~

date entered

JUN 30 1986

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Iowa Round Barns: The Sixty Year Experiment

and/or common

2. Location

street & number Multiple not for publication

city, town _____ vicinity of _____

state Iowa code 019 county Multiple code _____

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input checked="" type="checkbox"/> agriculture
<input checked="" type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
	<u>N/A</u>	<input type="checkbox"/> no	<input type="checkbox"/> military
			<input type="checkbox"/> museum
			<input type="checkbox"/> park
			<input type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation
			<input type="checkbox"/> other:

4. Owner of Property

name Multiple (Refer to individual site sheets)

street & number

city, town _____ vicinity of _____ state _____

5. Location of Legal Description

courthouse, registry of deeds, etc. Multiple

street & number

city, town _____ state _____

6. Representation in Existing Surveys

Survey and publication,
title Without Right Angles, by Lowell Soike has this property been determined eligible? yes no

date 1982 federal state county local

depository for survey records Iowa OHP

city, town Des Moines state IA 50319

7. Description

Condition

excellent
 good
 fair

deteriorated
 ruins
 unexposed

Check one

unaltered
 altered

Check one

original site
 moved date _____

Describe the present and original (if known) physical appearance

Octagon Barns, 1867-1890.

Octagon barns represented the most innovative thought of the 1870s-1880s in the practice of modern farming. The octagon barn's advantages over conventional barns included: a large volume of barn space built with fewer materials; superior wind resistance; a self-supporting roof without posts or purlins to obstruct the use of a hay fork; and greater convenience, through shorter lines of travel, in a day when farmers accomplished nearly all of their work by hand. Peak construction of octagon barns in Iowa occurred in the 1880s.

Expected ideal characteristics of Iowa's Octagon Barns, 1867-1890 include:

- * eight equal length exterior walls
- * construction date between 1867 and 1890
- * rectangular interior arrangement with runway through center of barn
- * heavy timber structural framing
- * multi-purpose or general use as contrasted to specialized use
- * no interior silo (pre-silo era)
- * derivative of one of two design influences: Elliott W. Stewart or Lorenzo S. Coffin

Elliott W. Stewart influenced octagon barns are specifically characterized by conical roofs constructed of eight wedge shaped pieces. These roofs are self-supporting and allow for clear, unobstructed loft space. The entire weight of the roof rests on the exterior walls of the barn. The Stewart prototype was topped by an eight sided cupola with a conical roof similar to the barn roof.

A significant variation of the Stewart-influenced octagon barn type are the bell shaped or dome roofed octagon barns built by carpenter George Frank Longerbeam of Downey, Iowa. Elegant hand-laminated roof beams are the distinguishing feature of these barns.

Lorenzo S. Coffin influenced octagon barns are specifically characterized by modified hip roofs. These roofs were constructed by "...extending four large trapezoidal sections directly to the roof top and fitting four smaller sections into the remaining triangular spaces" Not a self-supporting roof type, "the load at the roof's "hip" midpoint had to be transmitted to the ground through inside posts" (Soike 1983, p. 16).

A second phase of "the sixty year experiment" began in the 1890s. New theories and experimentation in barn design, construction, and use mark this period and the resulting Iowa barns. Round barns of all types built during the second 1890 to 1929 construction period in Iowa greatly outnumber those of the preceding 1867-1890 octagon period. Of the total 160 round barns known to have existed in the state, 136 are estimated to have been built during this second construction period, of which 107 are known to still exist. Furthermore, in contrast to the earlier octagon

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**

For NPS use only
received MAY 27 1986
date entered

Continuation sheet Description Item number 7 Page 2

period, the sources of design influence and the significant variations on the round barn type were also more numerous, and there occurred at this time a major shift in the function of the barn from general to special purpose.

True-Round Barns, 1890-1929.

The popularity of octagon barns in Iowa had peaked in the 1880's. By 1890, interest was beginning to shift to the newly introduced true-round barn: barns of circular horizontal section with (for the most part) centrally located interior silos. The development of the true-round barn was directly related to development of the circular silo, both were the result of a newly expanded scientific approach to agriculture. The special use was that of dairying.

In general, the expected ideal characteristics of Iowa's True-Round Barns include the following:

- * circular horizontal section
- * construction date between 1890 and 1929
- * circular interior arrangement
- * one of two forms of construction: wood balloon frame or vitrified clay tile
- * central silo (typical of the initial true-round barn period, less often found in later iterations)

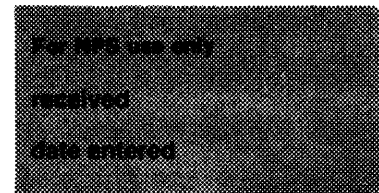
The source of experimentation in farm structures design shifted during the 1890's from progressive agriculturalists such as Elliott W. Stewart and Lorenzo S. Coffin to the college agricultural experiment station and the professional agricultural engineer. Franklin H. King, of the Wisconsin Agricultural Experiment Station is credited with designing the first generation of true-round barns. The Franklin H. King/Wisconsin Agricultural Experiment Station-influenced barns are specifically characterized by a true-round form, a central silo, and a non-self-supporting conical roof.

At the Illinois Agricultural Experiment Station, H. E. Crouch planned and tested the self-supporting roof for true-round barns which, when publicized in the station's bulletins of 1910 and 1918, gave the principal impetus to round barn construction in Iowa. H. E. Crouch/Illinois Agricultural Experiment Station-influenced round barns are specifically characterized by a true-round form with central silo, a circular interior arrangement, and a self-supporting roof, usually a single or double hip gambrel.

While the emergence of the true-round barn remained closely associated with the circular silo's growing popularity, gradually the true-round form took on a life of its own as its advocates worked to extend its adoption beyond simply dairying to other kinds of farm operations as well. In so doing, the round barn movement took on additional significance by virtue of being in the forefront of experimentation with (1) new building materials, (2) new marketing approaches, and (3) new methods of construction.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet

Description

Item number 7

Page 3

At the Iowa Agricultural Experiment Station Matt L. King, who had helped to develop the "Iowa-Type" clay tile silo and was a advocate of clay tile farm buildings, together with Professor J. B. Davidson made one improvement on the Illinois round barn model: substituting vitrified clay tile for wood exterior wall construction. Although clay tile was more expensive than wood, for circular structures it went up quickly and with less difficulty. The significant characteristics of a Matt L. King/Iowa Agricultural Experiment Station-influenced barn are a true-round, vitrified clay tile exterior wall, clay tile interior silo and, sometimes, a clay tile water tank atop the silo.

Clay tile manufacturers who are known to have supplied tile for round barns in Iowa include: Adel Clay Products Company; Johnston Brothers Clay Works, Inc.; Mason City Brick and Tile Company; and Mt. Pleasant Brick and Tile Manufacturing Company. Of these four known suppliers, the Johnston Brothers Clay Works assumed leadership in this field. True-round exterior walls of small dark red clay tile in the lower story with larger red tile above specifically characterize the Johnston Brothers' designs.

The significance of the development of the true-round "silo" barn constituted more than new methods of construction. The means of its promotion revealed the introduction of a new method of marketing: farm building design and construction services. These services put farmers in touch with expertise beyond that of the local carpenter by emphasizing the availability of specialized skills, manufactured materials, and the techniques of mass production. Working with plans derived from the designs of the college experiment stations, farm building consultants and construction firms were important for their influence on the evolution and actual construction of round barns in Iowa.

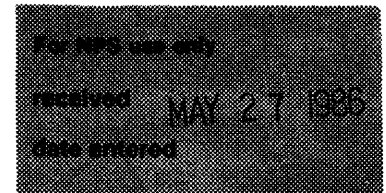
Two farm plan services known to have been involved in round barn construction in Iowa are the Architectural Department of the William Loudon Machinery Company in Fairfield, Iowa and the Permanent Buildings Society, the head of which was Matt L. King, in Des Moines, Iowa. Iowa round barns whose design has been influenced by a farm plan service may greatly vary individually but generally meet the expected ideal characteristics of the True-Round "Silo" Barn subtheme.

In addition to the clay tile manufacturers/barn builders such as Adel Clay Products Company, Johnston Brothers Clay Works, etc., another contractor who specialized in round barns and who is known to have worked in Iowa was builder Benton Steele. Again, individual round barns built by Benton Steele, or by other specialized contractors, may vary greatly but generally meet the expected ideal characteristics of this subtheme.

Of the Iowa round barns known to have been mail ordered or pre-fabricated, historic documentation reveals that one Cedar County round barn was ordered pre-cut from the factory of the Chicago House Wrecking Company, although little is known of this oddly named company. The firm of influence in Iowa was the Gordon-Van Tine Company, of Davenport, which advertized extensively in Iowa and midwestern farmpapers. Four Iowa round barns are known to have been built from plans and materials supplied by the Gordon-Van Tine Company. Sears, Roebuck And Company of Chicago also marketed a range of two-story octagonal barns with central cupolas. No Iowa round barns have

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Description

Item number 7

Page 4

been identified as being Sears barns. Significant characteristics of mail order and pre-fabricated barns are those of the expected ideal characteristics of the True-Round Barns subtheme.

Common Variations of the Round Barn, 1910-1920.

In the spirit of experimentation, venturesome Iowa farmers often departed from the innovative true-round form either developed by the agricultural experiment stations, or marketed by the design and construction services, to explore yet other design possibilities. The thrust of their work, carried on mainly between 1910 and 1920, resulted in five common variations of the round barn in Iowa.

Expected ideal characteristics of this subtheme include:

- * true-round or polygonal horizontal section
- * construction date between 1910 and 1920
- * circular interior arrangement
- * one of two forms of construction: vitrified clay tile or wood balloon frame
- * one of five identified common design variations: a fully surrounding wing, a large multi-windowed monitor, a flat or near flat roof, a dome roof, or polygonal form

The round barn with surrounding wing is specifically characterized by a two story true-round or polygonal central section of balloon frame construction with an integral one story, shed roofed, balloon-framed wing nearly completely encircling the central section.

Monitor round barns are specifically characterized by a large multi-windowed monitor, of much greater proportion than standard cupolas, which is designed to provide natural light and ventilation to the barn's interior.

Flat or near flat-roofed round barns are true-round or polygonal barns, usually one story, with a two story or taller central silo. The flat or near flat roof, in all known examples but one, is supported by the central silo and the exterior walls, the exception being a tension structure in Franklin County (see Site #57). The silo of each flat roofed barn extends upward above the roof.

Dome-roofed barns are easily recognized by their semi-spherical or gothic arch curved roofs. Roof construction is of laminated beams or of truss work.

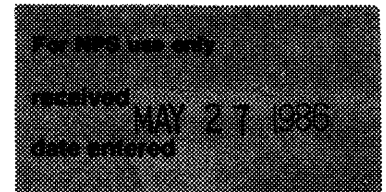
Polygonal barns of 6 to 16 sides are of balloon-frame construction, with sides of equal length, roofs of the same equal sections, and are generally quite similar to the true-round "silo" barns with centrally located interior silos.

Special Function Round Barns, 1890-1929.

Finally, the Iowa round barn of the 1890-1929 period represented a change of historical direction in traditional barn functions. The round barn's intended use was typically more specialized than that of its octagonal or rectangular predecessor. Round barns of this period were commonly designed for the special needs of dairying, yet research in Iowa has revealed that round barns were also

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Description

Item number 7

Page 5

specially designed for beef cattle and registered stock, for hogs, and for use as farm sale barns.

Expected ideal characteristics of Iowa's Special Function Round Barns, 1890-1929 include:

- * true-round or polygonal horizontal section
- * construction date between 1890 and 1929
- * circular interior arrangement
- * one of two forms of construction: wood balloon frame or vitrified clay tile
- * specialized use other than dairy

A beef cattle/registered stock barn is specifically characterized by the existence of original feed troughs or feed alleys in an open interior plan.

A hog barn is specifically characterized by the existence of original pens. Due to the concern for natural light and ventilation in these barns, hog barns

The special function of the farm sale barn was to house livestock as they were shown and sold to buyers. In most cases these barns were built without interior silos. The interior was usually open and well lit. No round sale barns are in operation today, but historic documentation and information gathered from owner surveys reveals that as many as ten were built across Iowa.

Methodology:

The primary information source for completion of this round barn nomination has been the 1983 Without Right Angles by Lowell J. Soike, Director and Deputy State Historic Preservation Officer of the Office of Historic Preservation, Iowa State Historical Department. Without Right Angles documents the history of round barns in Iowa and catalogs all known round barns, both extant and non-extant, in Iowa. A survey of Iowa round barns for this publication was begun in 1978 by Dr. Soike and staff of the Iowa Office of Historic Preservation. Both the publication and this thematic nomination are part of a larger farm building bibliographic research project, "The Changing Iowa Farm: Agricultural History Through Buildings," still in progress, and also directed by Dr. Soike.

All buildings included in this thematic nomination are considered historically significant at the state level. Of the 58 barns of this nomination only one, the Secrest-Ryan Octagon Barn of Johnson County, has been previously listed in the National Register of Historic Places. The Secrest Round Barn (originally listed as Secrest-Ryan Round Barn) as has been in the National Register since 1974 with an evaluation of statewide significance.

Of the seven National Register integrity criteria, with respect to this nomination, primary emphasis is placed on design and materials, with secondary emphasis accorded to feeling, association, workmanship, and setting and location. Round barns are evenly distributed across the state. The locational relationship between barns and their farmsteads has not been addressed in this thematic study. The construction, design, and use of the individual buildings of this nomination, rather than the relationship of these buildings to one another or to other farm buildings on

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 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 1867–1929 **Builder/Architect** Various

Statement of Significance (in one paragraph)

Round barns illustrate the historical movement within agriculture to make farm practices more efficient and economical. First prominent farmers and agricultural writers and later professional agricultural engineers and farm building designers worked to apply the understood scientific principles of farming to new building types and to new varieties of construction material and technique. The round barn, in its day, was among the innovative wonders of progressive agricultural change in Iowa. Although now obsolete on modern Iowa farms, those round barns which yet remain serve as reminders of a movement whose impact has been great: modern farming practice is based upon this same continuing tradition of scientific experimentation and the application of scientific principles. Within the theme of "the sixty year experiment," four subthemes have been identified: Octagon Barns, 1867-1890; True-Round Barns, 1890-1929; Common Variations of the Round Barn, 1910-1920; and Special Function Round Barns, 1890-1929.

"Much of the charm attached to round barns is, of course, intangible. Their shape, being unexpected on Iowa farms, is striking—curving walls and uninterrupted roof lines impart a clean, pure form, and the great interior loft gives dramatic effect. To walk through one is to journey into the past of bygone tasks and different needs, when this silent partner on the farm stood as the Iowa farmer's principle building. The round barn is a representation of that time and is something belonging to those years. Today, when a round barn is explored, such a time, for a moment, is captured" (Soike 1983, p. 78).

1867 was the construction date of the earliest known round barn in Iowa, the Lorenzo S. Coffin Octagon Barn in Webster County. 1929, the year of the collapse of the New York Stock Market and the beginning of the Great Depression, marks the end of a golden era in the history of American agriculture. Farm building construction essentially halted in 1929 not to resume until after the Second World War. It was between 1867 and 1929 that round barn construction in Iowa flourished, the product of economic prosperity and the enthusiasm of the time for experimentation and scientific application.

Early well known American round barns are the sixteen-sided round barn built in 1793 at Dogue Run by George Washington, the large 1826 Shaker true-round stone barn at Hancock, Massachusetts, and the octagon barn described by the popular octagon house promoter Orson Squire Fowler in his A Home for All (1854). Round barns such as these, built before the 1870s, were rare exceptions to the standard rectangular barn types. Intriguing as they are, their influence on the later popularity of round barns is accepted as minimal.

"The octagon barn attracted its first effective advocates after the mid 1870s...when certain farm improvement proponents among progressive farmers, stock breeders, and agricultural editors began to take an interest in octagon barns. Such octagon barns multiplied during the 1880s. The movement...owed its origins to Elliott W. Stewart at the national level and to Lorenzo S. Coffin in Iowa. ...Stewart and Coffin were

9. Major Bibliographical References

Refer to Continuation Sheet 9-2+

10. Geographical Data

Acreeage of nominated property each property contains less than one acre.

Quadrangle name Various, refer to site sheets.

Quadrangle scale Multiple

UTM References Refer to individual site sheets.

A

--	--	--	--	--	--	--	--	--	--	--	--

 Zone Easting Northing

B

--	--	--	--	--	--	--	--	--	--	--	--

 Zone Easting Northing

C

--	--	--	--	--	--	--	--	--	--	--	--

D

--	--	--	--	--	--	--	--	--	--	--	--

E

--	--	--	--	--	--	--	--	--	--	--	--

F

--	--	--	--	--	--	--	--	--	--	--	--

G

--	--	--	--	--	--	--	--	--	--	--	--

H

--	--	--	--	--	--	--	--	--	--	--	--

Verbal boundary description and justification

Refer to individual site sheets. Each barn is located within at least a quarter-section, the verbal boundary description (VBD) is provided on the front of each site sheet.

List all states and counties for properties overlapping state or county boundaries

state	N/A	code	county	code
-------	-----	------	--------	------

state	code	county	code
-------	------	--------	------

11. Form Prepared By

Form by James E. Jacobsen, National Register Coordinator

name/title Text and site sheets by Ms. Cheryl Peterson

Office of Historic Preservation

organization Iowa State Historical Department date March 4, 1986

street & number E. 12th & Grand Ave. telephone 515-281-4137

city or town Des Moines state Iowa 50319

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 Towell J. Soltz

title Deputy State Historic Preservation Officer date March 17, 1986

For NPS use only

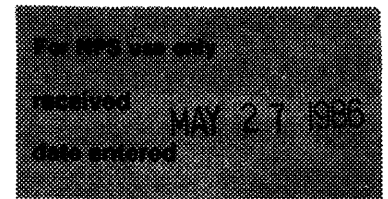
I hereby certify that this property is included in the National Register

J. Beth Grosvenor date 6/30/86
Keeper of the National Register

Attest: See continuation sheet for other listings date
Chief of Registration

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance

Item number 8

Page 2

well known and respected agriculturalists who had personal experience with octagon barns and who also wrote for popular agricultural newspapers. Their promotional writings and the publicity given their examples...inspired and largely explained Iowans' enthusiasm for octagon barns during these years. This generation...built most of the octagon barns we see today" (Soike 1983, p. 6-8).

Elliott W. Stewart of Erie County, New York was a farmer, a "lecturer on agriculture at Cornell University" (Soike 1983, p. 10), and the editor of the Buffalo, New York Live-Stock Journal. Stewart built a multi-purpose octagon barn on his Erie County farm in 1874 and soon after its construction published a description of the barn in his monthly journal. The barn was also published in the popular northeastern journals Cultivator and Country Gentleman and American Agriculturalist, and in the Illustrated Annual Register of Rural Affairs (1878). The National Live-Stock Journal of Chicago also printed an article on Stewart's barn, and the barn was described in J. P. Sheldon's Dairy Farming (1885) and in Stewart's own Feeding Animals (1883). Stewart's advocacy of this unusual barn type was based upon four main attributes: economy of materials; the advantage of a self-supporting roof without interior posts; the wind resisting strength of the octagon's near-circular form; and the shorter, more efficient lines of travel in the plan of the octagon.

Iowa round barns of this thematic nomination which show the influence of Stewart include:

#23. Bremer County

#53. Fayette County

(Other probably eligible barns under this subtheme include an octagon barn (#80) in Jasper County, an octagon barn (#86) in Johnson County, an octagon barn (#96) in Lyon County, an octagon barn (#98) in Marion County, and an octagon barn (#154) in Winneshiek County. Razed examples of this subtheme include the Hopkins Octagon barn (#21) in Boone County, the McCroskey octagon barn (#33) in Cedar County, an octagon barn (#52) in Fayette County and the Thompson octagon barn (#109) in Page County.)

Derivatives of the Stewart-influenced round barn include two Johnson County barns with roofs constructed of curving, hand-laminated beams, built in the 1880's by George Frank Longerbeam:

#82. Johnson County

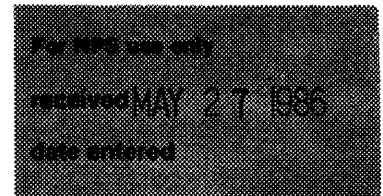
#83. Johnson County

(Lost applicable examples of Stewart or Stewart-influenced barns once stood in Cedar (#33), Fayette (#52), and Page (#109)).

Lorenzo S. Coffin, a pioneer stock breeder from near Fort Dodge in Webster County, built the first known round barn in Iowa, a bank-type octagon barn with a distinctive non-self-supporting modified hip roof. It is this unique roof type which specifically characterizes Coffin influenced octagon barns. Coffin built his octagon barn in 1867 on his model livestock farm, Willow Edge, although it was not until 1883 that this barn was published. As farm editor of the Fort Dodge

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance Item number 8 Page 3

Messenger, Coffin had previously written articles generally advocating octagon barns for their "economy, convenience and safety" (Soike 1983, p. 18), great storage capacity, wind resistance, and simple construction. Coffin's own barn appeared as the "front-page story in the lead January issue" of the "state's leading agricultural paper" (Soike 1983, p. 17-18) the Iowa Homestead.

Iowa round barns considered to have been influenced by the Coffin barn, and its publicity, and included in this thematic nomination:

- #30. Carrol County
- #59. Guthrie County
- #84. Johnson County
- #127. Story County

(Lost Coffin-influenced barns included ones in Keokuk (#87), Story (#129) and Webster (#149) Counties. Barn #153, Winneshiek County will be submitted in the near future.)

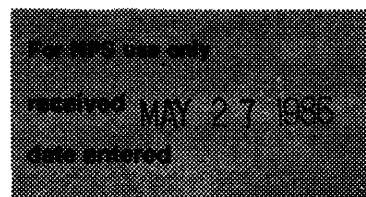
Octagon barns of the 1870's and 1880's, promoted by respected agriculturalists on the basis of their practical economy and efficiency, were yet a novelty. They were built by Iowa farmers of means who were not intimidated by the barns' unusual experimental character. By 1890, before gaining popular acceptance, interest in octagon barns had begun to fade. The majority of Iowa's round barns were built during a second construction period, 1890-1929, which saw the introduction of the new "silo" barn, with its many variations and improvements, and the introduction of the special function barn. Influential at this time were the college based agricultural experiment stations where the scientific study of agriculture was pursued. Also important to the development of round barns at this time were farm planning services, specialized barn contractors, and mail order and pre-fabricated barn suppliers. The round barn of this period was the "outgrowth of engineering research" (Soike 1983, p. 26), and of modern marketing.

Three developments in the areas of building construction and farm architecture were important at this time: the shift from heavy timber framing to light dimension balloon framing; "successful development of a properly constructed, large, self-supporting roof for true-round barns" (Soike 1983, p. 26); and the introduction of the circular silo. Though unconnected, each of these developments contributed significantly to the design of round barns of the 1890-1929 period.

Professor of Physics and agricultural engineer at the University of Wisconsin Agricultural Experiment Station, Franklin H. King is credited with originating the true-round round barn. The King prototype was a ninety-two-foot diameter wood frame round barn built near Whitewater, Wisconsin in 1889. The barn was designed to "enclose eighty cows and ten horses economically under one roof with feeding and cleaning alleys before and behind, plus a silo, a granary, and sufficient storage space for dry fodder" (Soike 1983, p. 26). King had previously perfected and promoted a cylindrical silo and with the 1889 round barn was very likely the first

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance

Item number 8

Page 4

barn designer to locate the silo at the barn's center.

"King published the plan of his true-round barn with explanation, in the 1890 Annual Report of the Wisconsin Agricultural Experiment Station as one "believed to be worthy of general imitation." W. D. Hoard reprinted it in an 1895 issue of his farm paper, Hoard's Dairyman. When, in 1897 a farmer built another such barn in Amsterdam, New York, along lines suggested by King, the editor once again publicized the event. He devoted substantial front-page space to a story about it, written by King for the paper's March 26 issue. J. H. Sanders reprinted King's original plan in his Practical Hints About Farm Building in 1893, as did the Chicago Breeder's Gazette in both its weekly journal and in editions of the book, Farm Buildings. And, of course, King himself included it in all six editions of his popular textbook on agriculture entitled A Text Book of the Physics of Agriculture, (6th edition in 1914)" (Soike 1983, p. 29).

The Iowa round barn of this thematic nomination which displays the influence of King and the Wisconsin Agricultural Experiment Station:

#103. Monroe County

(Other probably eligible examples under this sub-theme include the Reynolds true-round barn (#92) in Lyon County, the Cameron true-round (#133) in Taylor County, the Nelson true-round (#148) in Wayne County).

The Campbell true-round barn (#12), Audubon County (not included in this submission) represents the King influence and is the product of the Adel Clay Products Company. An unlocated true-round barn (#159) similarly linked to King, constructed by the Mason City Brick and Tile Company in 1912, would be eligible for nomination once it is located and evaluated.

H. E. Crouch of the Dairy Department, Illinois Agricultural Experiment Station, in Champaign-Urbana was the first to improve upon the King true-round "silo" barn. Between 1900 and 1910 three round barns designed by Crouch were built on the University's campus. The Illinois barns provided more natural light than the King barn and, most importantly, were built with self-supporting roofs, eliminating the need for interior posts for support of the roof-another improvement made in the name of economy and efficiency. "The Illinois station presented plans and detailed instructions in an experiment station bulletin in 1910 and again in a revised edition in 1918. Widely circulated, these publications lent authoritative support to the round barn as a legitimate type of farm architecture worthy of adoption" (Soike 1983, p. 29). In a 1911 article in Wallaces' Farmer, Henry A. Wallace highly praised the message of the 1910 bulletin in his "Economy of the Round Dairy Barn."

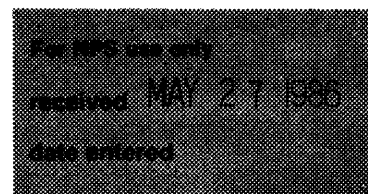
Iowa round barns of this thematic nomination which display the influence of Crouch and the Illinois Agricultural Experiment Station:

#7. Allamakee County

#49. Emmet County

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance

Item number 8

Page 5

- #58. Greene County
- #85. Johnson County
- #100. Marshall County
- #101. Marshall County (for determination of eligibility)
- #104. Montgomery County
- #119. Pottawatomie County

(probable candidates for later listing under this sub-theme include the Swenson true-round barn (#3) Allamakee County, the Lamborn true-round barn (#5), same county, an unnamed true-round barn (#8) in the same county, the McCleren true-round barn (#11) in Audubon County, a true-round (#20) in Black Hawk County, a true-round barn (#40) in Clayton County, the Bomgaars true-round (#91), Lyon County, the Tunnicliff true-round barn (#108), Page County, the Reid true-round barn (#135) in Union County, and a unnamed true-round barn (#155) in Wright County).

A regionally known "Iowa Barn" was developed by engineers Professor J. B. Davidson and Matt L. King working at the Iowa Experiment Station in Ames, Iowa. An improvement on the round barns of the Illinois Agricultural Experiment Station, the Davidson and King round barn employed hollow clay tiles for its true-round exterior wall, silo wall, and water tank. The availability of a plan for an "Iowa Barn" of clay tile is known to have been publicized in a 1916 Iowa College of Agriculture Extension Department Bulletin, although it is believed that this barn was introduced to the public as early as 1910. The clay tile-walled true-round barn became the single most popular round barn built in Iowa, counting for more than one-half of all round barns built during the 1890-1929 period.

Iowa round barns of this thematic nomination which have been influenced by Davidson and King and the Iowa Experiment Station, and for whom a hollow clay tile manufacturer/supplier has been identified (Johnston Brothers Clay Works, Inc., clay tile supplier) include:

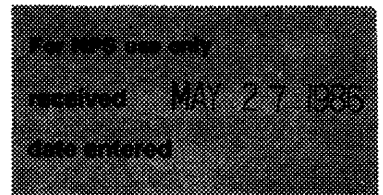
- #13. Benton County
- #14. Benton County
- #15. Benton County
- #24. Buchanan County
- #39. Clay County
- #48. Dubuque County
- #56. Floyd County
- #116. Pocahontas County
- #130. Tama County
- #151. Winnebago County

(other probably eligible barns under this sub-theme include a true-round barn (#50) in Fayette County, a true-round barn (#63) in Hancock County, two true-round barns (#65, and #66) in Hardin County, and a true-round barn (#131) in Tama County. Barn #151, Webster County, has been demolished.)

Iowa round barns of this nomination which have been influenced by Davidson and King

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance Item number 8 Page 6

and the Iowa Experiment Station, and for whom a hollow clay tile manufacturer/supplier has not been identified include:

- #18. Black Hawk County
- #36. Chickasaw County
- #55. Floyd County
- #57. Franklin County
- #62. Hamilton County
- #74. Iowa County
- #132. Tama County
- #136. Van Buren County

(other probably eligible barns under this sub-theme include the Thompson true-round barn (#16) in Benton County, a true-round barn (#19) in Black Hawk County (to be submitted in near future), a true-round barn (#42) in Crawford County, a true-round barn (#46) in Dickinson County, a true-round barn (#47) in Dickinson County, a true-round barn (#97) in Mahaska County, a true-round barn (#114) in Plymouth County, a true-round barn (#117) in Pocahontas County, and the Belcher true-round barn (#126) in Story County. Demolished examples include two true-round barns (#17) in Black Hawk, and the White true-round barn (#71) in Humboldt County.)

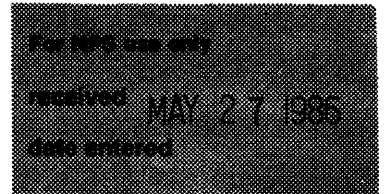
"Inspired by the authoritative backing for round barns given in experiment station publications, a new breed of barn specialists moved into the field - farm plan services, individual contractors, architects, and companies supplying the actual barn pre-cut at the factory. Such specialists, often using organized methods of advertising and marketing, offered this novel barn to attract "progressive" and "wide-awake" farmers" (Soike 1983, p. 44).

One known product of an Iowa farm plan service is the Cramlet Round Barn built in 1921 in Van Buren County with plans from the Architecture Department of the William Loudon Machinery Company of Fairfield, Iowa. A barn equipment manufacturer, "Louden found it advantageous and profitable to supply the plans that would then open a market for his main stock-in-trade: labor-saving equipment...The company's catalog, Louden Barn Plans (1915), featured two round barn designs, one of clay tile and the other of wood" (Soike 1983, p. 44). The Cramlet barn, a clay tile version, was praised locally in a Fairfield Ledger-Journal article of April, 1923 as being "as modern a barn as may be found." Although an excellent example of the work of farm plan services, the original roof has, unfortunately, been replaced, significantly altering this barn and disqualifying it for inclusion in this thematic nomination.

A second farm plan service, the Permanent Buildings Society of Des Moines, headed by design consultant Matt King, is known to have provided plans for at least two round barns in Iowa. The design of one of Iowa's most unusual barns, a 1916 Franklin County round barn, was assisted by King through the Society. The barn is a 122 foot diameter, one story clay tile building with a flat roof innovatively suspended by cables attached to a central two story clay tile silo. King described the barn in a 1917 article in American Carpenter and Builder entitled "Umbrella for the Cattle."

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet

Significance

Item number 8

Page 7

It is a barn which has attracted much attention and speculation due to its novel, experimental construction. The other known Iowa round barn designed with assistance from the Permanent Buildings Society is a more conventionally constructed clay tile round barn, with a single hip gambrel roof, located in Henry County.

Iowa round barns of this thematic nomination which are known to have been directly influenced by the Permanent Buildings Society:

#57. Franklin County

#68. Henry County

Providers of farm plan services generally were not involved in the actual construction or supervision of farm buildings—this could be left to local carpenters or to specialized barn contractors and their traveling construction crews. One such specialized builder/architect was Benton Steele. Steele first built barns in the dairy districts of Indiana and Wisconsin and later in Iowa, Nebraska, and Kansas. To advertise his work and hopefully interest new customers, Steele regularly wrote articles explaining his latest designs in agricultural journals such as "...Kimball's Dairy Farmer of Waterloo, the Breeder's Gazette of Chicago, or in Hoard's Dairyman of Fort Atkinson, Wisconsin" (Soike 1983, p. 50).

The only known extant round barn constructed by Benton Steele in Iowa is the Nebergall Round Barn, built in 1914, which is included in this thematic nomination:

#122. Scott County

(Two examples, the Hollenbeck true-round barn (#2), Adair County, and the White true-round barn (#71), Humboldt County, related to this sub-theme, have been razed.)

Other specialized barn contractors/construction firms which contributed significantly to the round barn phenomenon in Iowa included the manufacturers/suppliers of the hollow clay tile used in farm building construction. Of particular interest is the Johnston Brothers Clay Works, Inc., of Fort Dodge, Iowa who, in 1910, built the first known hollow clay tile round barn in the state. The barn was built on a farm adjacent to the clay pit and was built to advertise the firm's clay products. It is believed that the Johnston Brothers went on to build, or provide the tile and design for, at least seventeen similar round barns in Iowa, generally located in the north central counties.

Iowa round barns of this thematic nomination which show the influence of clay tile manufacturers/construction firms include:

#13. Benton County

#14. Benton County

#15. Benton County

#18. Black Hawk County

#24. Buchanan County

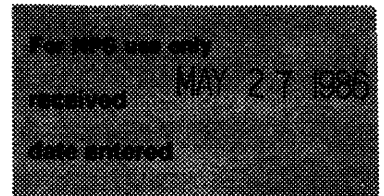
#36. Chickasaw County

#39. Clay County

#48. Dubuque County

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance Item number 8 Page 8

- #55. Floyd County
- #56. Franklin County
- #57. Franklin County
- #62. Hamilton County
- #74. Iowa County
- #116. Pocahontas County
- #130. Tama County
- #132. Tama County
- #150. Webster County
- #151. Winnebago County

Of the mail order providers of round barns, only the Gordon-Van Tine Company of Davenport is known to have examples of its product still standing in Iowa. The company sold pre-cut, labeled lumber, and accompanying plans, which were marketed through extensive advertising in the "...Iowa Homestead, Wallaces' Farmer, and other midwestern farm papers" (Soike 1983, p. 53). "To help make its case, Gordon-Van Tine appealed to the authority of agricultural experiment station research, which recommended round barns as enclosing a "greater floor area" than rectangular barns and making easy and "quickly accomplished" the chores of feeding and cleaning" (Soike 1983, p. 54). The strength of the round barn was also emphasized. The Chicago House Wrecking Company is the only other known provider of a mail order round barn during this time. A fourteen sided round barn in Cedar County, no longer standing, was delivered by this firm to a farmer named Moffit in the mid 1910's. Sears, Roebuck And Company of Chicago, by 1918 advertised an octagonal barn with cupola in its Building Material & Millwork catalog (Chicago: Sears, Roebuck And Company, 1918). No Iowa barns have yet been linked to this pre-cut source.

Iowa round barns of this thematic nomination for which material and plans were supplied by the Gordon-Van Tine Company include:

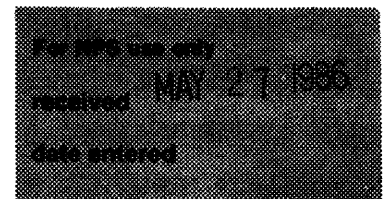
- #44. Davis County
- #100. Marshall County
- #101. Marshall County (for determination of eligibility)

(The Bomgaars true-round barn (#91), Lyon County is probably eligible for listing under this sub-theme).

"Farmers and carpenters...undoubtedly drew upon published plans for their basic design information" (Soike 1983, p. 41), but the experimentation which began at the college agricultural stations did not stop at those research facilities nor with the designs of the planning services and specialty contractors. It was, instead, continued by each farmer who built a new round barn. "Not one round barn in Iowa precisely duplicated another" (Soike 1983, p. 41). From the arrangement of the interior to the cupola topping the roof, the personal preferences of the owner and the particular skills of the builders produced a great variety of roof shapes, exterior wall types, window placement and door openings, dormers, and entry arrangements. Five commonly repeated variations of the round barn appeared between approximately 1910 and 1920: the round barn with a fully surrounding wing; the round

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance Item number 8 Page 9

barn with a large multi-windowed monitor; the flat or near flat-roofed round barn; the dome-roofed round barn; and the polygonal barn of 6 to 16 equal sides.

Articles featuring two true-round barns with fully surrounding wings were published in the American Carpenter and Builder, one in a 1915 article on the A. J. James beef cattle barn in Marion County and the other a 1913 description of the J. B. Fry barn in Plymouth County. Three times between 1902 and 1910 Wallaces' Farmer published the plan of a twelve-sided stock barn with an encircling wing built by Lloyd Z. Jones, an Illinois farmer; and, consequently, at least three barns of similar design appeared in Iowa.

Iowa round barns with encircling wings included in this thematic nomination:

- #73. Ida County
- #99. Marion County (for determination of eligibility)
- #121. Ringgold County
- #140. Warren County

(An octagonal hog barn (#1) in Adair County and a true-round barn (#4) in Allamakee County qualify under this subtheme and will be submitted at a later date when sufficient information is received. Lost examples of this subtheme include a Hartwig polygonal barn (#35) in Cedar County, and the Fry true-round barn (#115) in Plymouth County.)

The multi-windowed monitor was developed to increase daytime interior light levels. Several of these varieties were built in Iowa along the lines of a circular hoghhouse in McLean County, Illinois which was featured in the February 26, 1920 issue of Breeder's Gazette.

The one Iowa round barn with a multi-windowed monitor included in this thematic nomination:

- #111. Page County

(Other probably eligible barns which speak to this subtheme include an octagon barn (#45) Decatur County, a polygonal hog barn (#60) in Guthrie County, the Saunders octagon barn (#124) in Shelby County, and a true-round barn (#125) in Sioux County will be submitted when additional documentation is available.

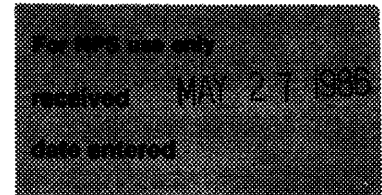
The flat or near flat roofed round barn is a strikingly unusual variation. Little is known about the sources of information used by farmers to construct this type of round barn apart from the spectacular Franklin County example described in the June, 1917 issue of the American Carpenter and Builder.

Iowa round barns with flat or near flat roofs included in this nomination:

- #6. Allamakee County
- #51. Fayette County
- #57. Franklin County
- #77. Jackson County

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance Item number 8 Page 10

(A true-round barn (#131) in Tama County is probably eligible under this theme. The French true-round barn (#137) in Van Buren County has a flat roof, but was originally covered with a gambrel roof, and is therefore not eligible).

In the 1880s two Johnson County octagon barns were built by George Frank Longerbeam using laminated beams to produce beautiful bell shaped roofs. After 1890, at least three dome-roofed true-round barns were built in Iowa. As of yet, little is known of the history or construction of these unique buildings.

Dome roofed round barns included in this nomination:

- #41. Clayton County
- #113. Plymouth County

Barn #28, Calhoun County will be nominated soon. Most polygonal barns of 6 to 16 equal sides built after 1890 are a variation on the Illinois Experiment Station true-round design. The influence of the earlier octagon barns is less significant but still apparent in the polygonal barn.

Iowa round barns of 6 to 16 equal sides included in this thematic nomination:

- #37. Chickasaw County
- #67. Harrison County
- #70. Howard County
- #88. Kossuth County

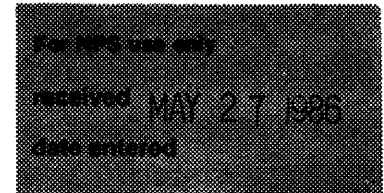
(other probably eligible barns under this sub-theme include a polygonal barn (#10) in Allamakee County, a polygonal barn (#32) in Cass County, the Nicholson polygonal (#54) in Floyd County, an octagon barn (#75) in Iowa County, the Averland polygonal barn (#81) in Jasper County, the Houston octagon barn (#90) in Lee County, a polygonal barn (#94) in Madison County, a polygonal barn (#105) in Montgomery County, the Brayment polygonal barn (#110) in Page County, and an octagon barn (#120) in Poweshiek County. The Lentz polygonal barn (#118) in Polk County is non-extant).

The Iowa round barn of the 1890 to 1929 period represented a change of historical direction in the traditional function of the barn, from multi-purpose or general use to specialized use. While this observation is believed to be significant, the reasons behind the change in barn function have not been fully researched and documentation can not be cited.

In the 1880s the octagon barn was considered innovative and progressive because it brought together under one roof many farm functions previously housed individually. One large, well designed barn where hay, grain, animals, work space, etc. could all be accommodated was then advocated over the typical additive collection of small buildings and sheds. The large multi-purpose barn was considered more convenient and efficient and less expensive to maintain.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance Item number 8 Page 11

By the 1890s, when true-round barns were developed, large special purpose barns became the trend. The true-round barn designed by Franklin King, the true-round barns designed by H.E. Crouch, and the true-round barn designed by J.B. Davidson and Matt King were each specially planned for use as dairy barns. While many of the round barns built in Iowa between 1890 and 1929 are known to have been dairy barns, other special function round barns found in the state include barns designed for beef cattle and registered stock, for hogs, and for use as farm sale barns. Changes at this time in farm size or in farming methods or in the agricultural markets may be found to account for special function barns.

Iowa round barns known to have been specially designed for dairy use and which are included in this thematic nomination are:

- #7. Allamakee County
- #18. Black Hawk County
- #24. Buchanan County
- #36. Chickasaw County
- #41. Clayton County
- #48. Dubuque County
- #55. Floyd County
- #85. Johnson County
- #103. Monroe County
- #119. Pottawatomie County
- #148. Wayne County

(Other probably eligible barns which relate to this subtheme include the Lamborn true-round barn (#5) Allamakee County, a true-round barn (#20) Black Hawk County (reported being demolished), an octagon barn (#43) in Dallas County, a polygonal barn (#88) in Kossuth County, and a true-round barn (#126) in Story County. Lost examples of this subtheme include the Fry true-round barn (#115) in Plymouth County and a true-round barn (#156) in Wright County.)

Iowa round barns known to have been specially designed for cattle/registered stock and included in this thematic nomination:

- #6. Allamakee County
- #13. Benton County
- #58. Greene County
- #67. Harrison County
- #74. Iowa County

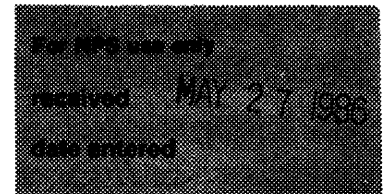
(Other probably eligible barns under this subtheme include a polygonal barn (#31) in Cass County, a true-round barn (#57), Franklin County, an octagon barn (#59) in Guthrie County, a true-round barn (#113) in Plymouth County, and the Miligan polygonal barn (#134) in Taylor County.

Iowa round barns known to have been specially designed for hogs and included in this thematic nomination:

- #62. Hamilton County
- #105. Montgomery County

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Significance

Item number 8

Page 12

#141. Washington County
(other probably eligible barns under this subtheme include a polygonal barn #60) in Guthrie County, and two true-round barns (#95 and #96) in Madison County.

Iowa round barns known to have been specially designed as farm sale barns and included in this thematic nomination:

- #62. Hamilton County
- #70. Howard County
- #78. Jackson County
- #102. Monona County
- #111. Page County
- #136. Van Buren County

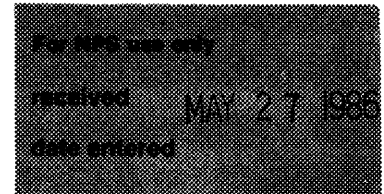
(Another probably eligible barn under this subtheme includes an octagon barn (#124) in Shelby County. Lost examples include the Ruebel octagon barn (#27) in Buena Vista County, a true-round barn (#69) in Henry County, and the Favre octagon barn (#107) in Osceola County.)

Two barns, not included in the present nomination, were constructed for the special use of machine storage. It is probable that the Ericksen six-sided barn (#26), Buena Vista County and an unnamed six-sided barn (#22) in Boone County will be submitted at a later date.

Throughout the historic era of round barn popularity, numerous critics and doubters were to be found among farmers, agricultural newspaper editors, and among agricultural engineers. Even in its heyday during the 1910's, the round barn was a oddity, never gaining popular acceptance. The round barn was often criticized for its complex construction. It was also criticized because its central silo was difficult to fill and required the construction of a larger barn; it was criticized because round barns were often dark; and because building new additions onto a round barn usually proved troublesome. Possibly most significant, round barns never gained popular acceptance because working "in-the-round" was too difficult an adjustment for farmers accustomed to carrying out their tasks in rectangular buildings. In the end, the introduction of the farm tractor so changed farming practice that the round barn, designed in the age of horse farming, became obsolete. Now diminishing in number, a rare sight in our modern rural landscape, "...round barns inform us of an era when questions of how to improve farm practices in Iowa moved many to try more efficient means of bringing hay, pasturage, and animals under one roof. The round barn represented an important part of that effort" (Soike 1983, p. 68).

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Description

Item number 7

Page 6

individual farm sites, has been our primary concern.

At present, 160 round barns have been identified in Iowa. The 102 barns not included in this nomination are either non-extant, are too severely deteriorated or altered to warrant preservation, are lacking important physical characteristics of their identified type, or have not yet been adequately researched. As research continues, additional round barns which meet the criteria of this thematic nomination are expected to be identified and additional round barn types and possibly new subthemes are expected to be discovered.

Individual building inventory forms are included as an appendix to this form. Non-extant barns and barns deemed potentially eligible for subsequent nomination are noted in the significance summary under each subtheme.

Definitions:

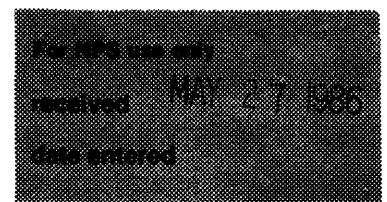
All round barns included in this thematic nomination are related historically. They are the products of a historical movement within American agriculture aimed at making farm practices more efficient and economical, an experimental period during which scientific principles of farming were applied to develop new building types and construction methods. These unusual and striking barns were built between 1867 and 1929 on private farms throughout Iowa. The buildings listed in this thematic nomination are those Iowa round barns which have been most thoroughly researched and are known to best illustrate this approximately sixty year period of experimentation.

"Round Barn," for the purpose of this description, is a "...generic term for barns of circular shape and barns with five or more sides of equal length" (Soike 1983, p95). Within the theme of agricultural experimentation during the years 1867-1929, Iowa Round Barns are further distinguished by the following subthemes: Octagon Barns, 1867-1890; True-Round Barns, 1890-1929; Common Variations of the Round Barn, 1910-1920; and Special Function Round Barns, 1890-1929.

For all octagon barns, and for every other Iowa round barn described in this nomination, the foundation, siding and roofing materials, windows and pedestrian door locations, roof dormers, metal aerators, decoration, and most mechanical equipment, all of which are subject to renovation and replacement throughout the normal use of a barn, while important have been regarded as secondary to considerations of overall building form, construction type, interior arrangement, function, and design influence.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**



Continuation sheet Bibliography

Item number 9

Page 2

Agricultural Newspapers/Journals

- Albany (N.Y.) *Cultivator and Country Gentleman*. 1854-1930.
- Burt, S.C. "Advantages and Disadvantages of the Round Barn: First One Built 25 Years Ago." *Huntington Indiana Farmer's Guide* 30 (1918):5.
- Chicago (Ill.) *Breeder's Gazette*. 1895-1910.
- Chicago (Ill.) *National Live-Stock Journal*. 1872-1888.
- Chicago (Ill.) *Prairie Farmer*. 1869-1872, 1885-1886, 1888, 1916, 1919, 1921-1922, 1925.
- Coffin, Lorenzo S. "Barns." *Fort Dodge Messenger*. Oct. 20, 1882.
- Des Moines (Iowa) *Homestead*. 1865-1916.
- Des Moines (Iowa) *Wallaces' Farmer*. 1893-1930.
- Ft. Atkinson (Wis.) *Hoard's Dairyman*. 1891-1920.
- New York City (N.Y.) *American Agriculturalist*. 1860-1886.
- "Round Barn for Economy." *Field Illustrated* 26 (1916): 270.
- "Round Barn is Farm Landmark." *Fairfield (Iowa) Daily Ledger-Journal*, April 25, 1923.
- Souer, Mrs. James. "Landmark Near Delta, An Eight-Sided Barn, Nor Longer Stands." *Oskaloosa Daily Herald*, November 27, 1965.
- "Those Curious Round Barns." *Doon (Iowa) Press*, February 1, 1973.
- Waterloo (Iowa) *Kimball's Dairy Farmer*. 1911-1925.
- West Branch (Iowa) *Local Record*, May 31, 1883.

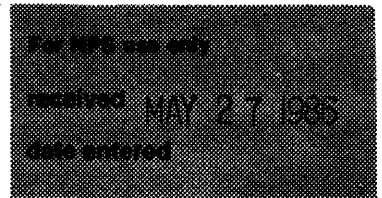
General Works

- Apps, Jerry, and Strang, Allen. *Barns of Wisconsin*. Madison, Wis.: Tamarack Press, 1977.
- Arthur, Eric and Witney, Dudley. *The Barn: A Vanishing Landmark in North America*. Greenwich, Conn.: New York Geographic Society Ltd., 1972.
- A. T. Andreas' *Illustrated Historical Atlas of the State of Iowa, 1875-1875*. Reprint. Iowa City: Iowa State Historical Society, 1970.
- Biographical Record and Portrait Album of Webster and Hamilton Counties, Iowa*. Chicago: Lewis Publishing Company, 1888.
- Breeder's Gazette. Farm Buildings*. Chicago: Breeder's Gazette, 1916.
- Britt Centennial Committee. *Recollections of Britt, Iowa 1878-1978*. Britt, Iowa: Britt Centennial Committee, 1978.
- Cedar County Historical Society. *Cedar County Historical Review*. Tipton, Iowa: Cedar County Historical Society, 1980.
- Centennial History Book Committee. *Centennial History Book of Anita: A Century Untold, 1875-1975*. Anita, Iowa: Anita Centennial Committee, 1975.
- Centennial Book Committee. *Humeston Centennial 100 Years, 1872-1972*. Humeston, Iowa: Humeston New Era-Madrid Register News, 1972.
- Ekblaw, K.J.T. *Farm Structures*. New York: Macmillan Company, 1916.
- Foster, W.A. and Carter, Deane G. *Farm Buildings*. New York: John Wiley and Sons, Inc., 1922.
- Foster, W.A. and Weaver, Earl. *Dairy Barns and Equipment*. Iowa State College of Agriculture and Mechanic Arts Agricultural Experiment Station Circular 93. Ames, 1925.
- Foster, W.A. and R.S. Stephensen. *Cattle Feeding Barns and Shelters*. Iowa State College of Agriculture and

- Fowler, Orson Squire. *A Home for All; or, The Gravel Wall and Octagon Mode of Building*. New York: Fowler and Wells, 1854.
- Fraser, Wilber J. *Economy of the Round Dairy Barn*. University of Illinois Agricultural Experiment Station Bulletin 143. Urbana, Ill., 1910.
- Fraser, Wilber J. *The Round Barn*. University of Illinois Agricultural Experiment Station Circular 230. Urbana, Ill., 1918.
- Frudden, W.E. *Farm Buildings: How to Build Them*. Charles City, Iowa: Privately Printed, 1916.
- Giese, Henry. "Trends in Farm Structures." In *A Century of Farming in Iowa 1846-1946*. Ames: Iowa State College Press, 1946.
- Gordon-Van Tine Company. *Gordon-Van Tine Farm Buildings*. Davenport, Iowa: Gordon-Van Tine Company, 1917.
- Gordon-Van Tine Company. *Gordon-Van Tine Farm Buildings*. Davenport, Iowa: Gordon-Van Tine Company, 1926.
- Halstad, Byron D. *Barns, Sheds and Outbuildings*. 1881. Reprint. Brattleboro, Vt.: Stephen Greene Press, 1977.
- Hawarth, Paul Leland. *George Washington: Farmer*. Indianapolis: Bobbs-Merrill Company, 1915.
- History of Fort Dodge and Webster County, Iowa*. Vol. I. Chicago: Pioneer Publishing Company, 1913.
- Hood, Doris. *Fulton County's Round Barns*. Rochester, Ind.: Fulton County Historical Society, 1971.
- Illustrated Annual Register of Rural Affairs*. Albany, N.Y.: Cultivator and Country Gentleman, 1878.
- Jost, Larry T. *The Round and Five-or-More Equal Sided Barns of Wisconsin*. Franklin, Wis.: Privately Printed, 1980.
- King, Franklin H. *A Textbook of the Physics of Agriculture*. 6th ed. Madison, Wis.: Privately Printed, 1914.
- King, F.H. *The Construction of Silos*. University of Wisconsin Agricultural Experiment Station Bulletin 28. Madison, Wis., 1891.
- King, F.H. *Plan of a Barn for a Dairy Farm*. University of Wisconsin Agricultural Experiment Station Seventh Annual Report. Madison, Wis., 1890.
- Lampard, Eric E. *The Rise of the Dairy Industry in Wisconsin: A Study of Agricultural Change 1820-1920*. Madison: State Historical Society of Wisconsin, 1963.
- Leading Events in Johnson County History: Biographical*. Cedar Rapids, Iowa: Western Historical Press., 1913.
- List of Farm Buildings Plans. Iowa College of Agriculture Extension Department Bulletin 23. Ames, 1916.
- Louden Machinery Company. *Louden Barn Plans*. Fairfield, Iowa: Louden Machinery Co., 1915.
- National Silo Association. *The History of Concrete Tower Silos and the Silo Association*. Waterloo, Iowa: Privately Printed, 1977.
- Ohlerking, Damon. *A Common Beginning*. Fort Dodge, Iowa: MIDAS Council of Governments, 1975.
- Portrait and Biographical Record of Johnson, Poweshick and Iowa Counties, Iowa*. Chicago: Chapman Brothers, 1893.
- Radford, William A., ed. *Radford's Practical Barn Plans*. Chicago: Radford Architectural Company, 1909.
- Roberts, Issac Phillips. *The Farmstead*. 7th ed. New York: Macmillan Company, 1914.
- Robinson, Solon, ed. *Facts For Farmers*. 2 vols. New York: A.J. Johnson, 1868.
- Sanders, J.H. *Practical Hints About Barn Building*. Chicago: J.H. Sanders Publishing Company, 1893.
- Schmidt, Carl F. *The Octagon Fad*. Scottsville, N.Y.: Privately Printed, 1958.

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form



Continuation sheet Bibliography

Item number 9

Page 3

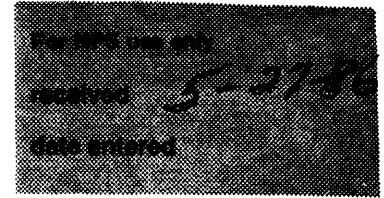
- Mechanic Arts Agricultural Experiment Station
Circular 74. Ames, 1922.
- Sequin, Robert-Lionel. *Les Granges de Quebec du X^{VII}e au
XIX^e siecle*. Musee National Du Canada, Bulletin
no. 192. Ottawa: Ministere du Nord Canadien et
des Ressources Nationales, 1963.
- Seymour, E.L.D. *Farm Knowledge*. vol. 3. Garden City,
N.Y.: Doubleday, Page and Company, 1918.
- Shearer, Herbert A. *Farm Buildings*. Chicago: Frederick J.
Drake & Co., 1917.
- Sheldon, J.P. *Dairy Farming*. London and New York:
Cassell, Petter, Gilpin and Company, ca. 1885.
- Sloan, Eric. *An Age of Barns*. New York: Random House,
Inc., Ballantine Books, 1974.
- Stewart, Elliott. *Feeding Animals: A Practical Work Upon the
Laws of Animal Growth Specially Applied to the Rear-
ing and Feeding of Horses, Cattle, Dairy Cows, Sheep
and Swine*. 2d ed. Lake View, N.Y.: Privately
Printed, 1883.
- Tieman, Tamara. "The Silo in Iowa: A Literature Survey."
Preliminary farm structure report prepared for
the Iowa State Historical Department, Office of
Historic Preservation, 1977.
- Wells, Wilson L. *Barns in the U.S.A.* San Diego, Califo.:
Acme Printing Co., 1976.
- White, F.M. and Griffith, D.I. *Barns for Wisconsin Dairy
Farms*. Wisconsin Agricultural Experiment Station
Bulletin 266. Madison, Wis., 1916.

Articles

- Alexander, C.O. "A Round Clay Tile Barn." *American
Carpenter and Builder* 15 (1913): 64-65.
- Diers, B.J. "90 Foot Round Barn." *American Carpenter and
Builder* 17 (1914): 68-69.
- Fish, N.S. "The History of the Silo in Wisconsin." *Wisconsin
Magazine of History* 8 (1924): 167-168.
- Frudden, W.E. "A Round Dairy Barn of Hollow Tile." *Building
Age* (1915): 27-28.
- Gratke, G.E. "Large Round Dairy Barn." *American
Carpenter and Builder* 17 (1914): 68-69.
- Hartman, Lee. "Michigan Barns, Our Vanishing
Landmarks", *Michigan Natural Resources*. 45
(1976): 17-32.
- King, Matt L. "An Umbrella for the Cattle." *American
Carpenter and Builder* 23 (1917), 54-55.
- Koerselman, Dick and Gladys. "LeMars Round Barn —
Its Move and Memories." *The Bracket* (Spring
1982).
- Perrin, Richard W.E. "Circle and Polygon in Wisconsin
Architecture: Early Structures of Unconventional
Design." *Wisconsin Magazine of History* 47 (1963):
50-58.
- Ross, Earle D. "Lorenzo S. Coffin — Farmer." *The
Palimpsest* 22 (1941): 289-292.
- Throne, Mildred. "'Book Farming' in Iowa." *Iowa Journal
of History* 49 (1951): 117-142.
- Welsch, Roger L. "The Nebraska Round Barn." *Journal of
Popular Culture* 1 (1968): 403-409.
- Welsch, Roger L. "Nebraska's Round Barns." *Nebraska
History* 51 (1970): 49-92.
- Westerfield, Richard. "There's Character in Barns." *Iowan*
12 (1964): 36-40.
- Whitnev, Stephen T. "Round Barns." *Vermont Life* 25
(1971): 8-15.
- Whyte, Bertha Kitchell. "Octagonal Houses and Barns." *Wisconsin
Magazine of History* 34 (1950): 42-46.

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form



Continuation sheet

Item number

Page 1-6

Multiple Resource Area
Thematic Group

dnr-11

Name Iowa Round Barns: The Sixty Year Experiment TR
State Allamakee County and others, IOWA

Cover *Review*

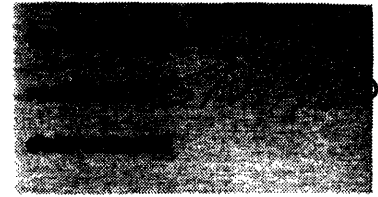
Nomination/Type of Review

Date/Signature

- | | | | | | |
|-----|----------------------------|----------------------------------|------------|-----------------------|----------------|
| 1. | James Round Barn | Substantive Review | Keeper | <u>Beth Grosvenor</u> | <u>6/30/86</u> |
| | DOE/OWNER OBJECTION | | Attest | _____ | |
| 2. | Yordy Round Barn | Substantive Review | Keeper | <u>Beth Grosvenor</u> | <u>6/30/86</u> |
| | DOE/OWNER OBJECTION | | Attest | _____ | |
| 3. | Brooks Round Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 4. | Buck, W.J., Polygonal Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 5. | Clark Round Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 6. | Darrow, George, Round Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 7. | Dobbin Round Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 8. | Dyas Hexagonal Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 9. | Eckle Round Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |
| 10. | Fobes Octagon Barn | Entered in the National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | |

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form



Continuation sheet

Item number

Page 2-6

Multiple Resource Area
Thematic Group

Name Iowa Round Barns: The Sixty Year Experiment TR
State Iowa

Nomination/Type of Review

Date/Signature

- | | | | | | |
|-----|---------------------------------------|-------------------------------------|------------|----------------------|----------------|
| 11. | Frantz Round Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 12. | Grimes Octagon Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 13. | Haner, William, Polygonal
Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 14. | Holtkamp Round Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 15. | Jordan, Thomas Polygonal
Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 16. | Longbottom Polygonal Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 17. | McCoy Polygonal Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 18. | McKenzie, Ezra, Round Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 19. | McQuilkin, James Greer,
Round Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |
| 20. | Meier, Fred W., Round Barn | Entered in the
National Register | for Keeper | <u>Delores Byers</u> | <u>6/30/86</u> |
| | | | Attest | _____ | _____ |

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Inventory—Nomination Form**

For NPS use only
received 5-27-86
date entered

Continuation sheet

Item number

Page 3-6

Multiple Resource Area
Thematic Group

Name Iowa Round Barns: The Sixty Year Experiment TR
State IOWA

Nomination/Type of Review

Date/Signature

21. Miller Round Barn

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

22. Nebergall "Knoll Crest"
Round Barn

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

23. Nus, August, Polygonal
Barn

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

24. Oakland, William, Round
Barn

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

25. Octagon Barn, Indian
Creek Township

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

26. Octagon Barn, Otter Township

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

27. Octagon Barn, Polk Township

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

28. Octagon Barn, Richland
Township

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

29. Plagmann Round Barn

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

30. Polygonal Barn, Lincoln
Township

Entered in the
National Register

for Keeper

Melrose Byers 6/30/86

Attest

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form

For NPS use only

received

5-27-86

date entered

Continuation sheet

Item number

Page 4-6

Multiple Resource Area
Thematic Group

Name Iowa Round Barns: The Sixty Year Experiment TR
State IOWA

Nomination/Type of Review

Date/Signature

31. Polygonal Barn, New Oregon Township

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

32. Polygonal Barn, Van Buren Township

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

33. Reburn, Thomas, Polygonal Barn

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

34. Roberts Octagon Barn

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

35. Ross, Seymour, Round Barn

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

36. Round Barn, Bruce Township Eagle Center vicinity

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

37. Round Barn, Bruce Township LaPorte vicinity

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

38. Round Barn, Buckingham Township

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

39. Round Barn, Cooper Township

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

40. Round Barn, Dubuque Township

Entered in the National Register

for Keeper

Melrose Byers 6/30/86

Attest

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form



Continuation sheet

Item number

Page 5-6

Multiple Resource Area
Thematic Group

Name Iown Round Barns: The Sixty Year Experiment TR
State IOWA *HALLAMAKE Co & others*

Nomination/Type of Review

Date/Signature

41. Round Barn, Millville Township

Entered in the

for Keeper

Melores Byers 6/30/86

Attest

42. Round Barn, Norway Township

*Entered in the
National Register*

Keeper

Melores Byers 2/27/87

Attest

43. Round Barn, Pilot Grove
Township

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

44. Round Barn, Washington Township
Montgomery County

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

45. Round Barn, Washington Township
Black Hawk County

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

46. Spotts Round Barn

for Keeper

Melores Byers 6/30/86

Attest

47. Tarrence Round Barn

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

48. Thomsen Round Barn

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

49. Waveland Round Barn

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

50. Wickfield Round Barn

*Entered in the
National Register*

for Keeper

Melores Byers 6/30/86

Attest

P-

United States Department of the Interior
National Park Service

National Register of Historic Places
Inventory—Nomination Form

For NPS use only
received 5-27-86
date entered

Continuation sheet

Item number

Page 6-6

Multiple Resource Area
Thematic Group

Name Iowa Round Barns: The Sixty Year Experiment TR
State IOWA

Nomination/Type of Review

Date/Signature

51. Wood, Herman, Round Barn

Entered in the
National Register

for Keeper
Attest

Allorea Byers 6/30/86

52. Young, John W., Round Barn

Entered in the
National Register

for Keeper
Attest

Allorea Byers 6/30/86

53. Nelson Round Barn

Entered in the
National Register

for Keeper
Attest

Allorea Byers 11/19/86

54. Kinney Octagon Barn

Substantive matter

Keeper
Attest

Beth Grosvenor 11/19/86

55. Knapp, Dr. Charles, Round Barn

Substantive matter

Keeper
Attest

Beth Grosvenor 12/23/80

56. Rownd, C. A., Round Barn

Entered in the
National Register

for Keeper
Attest

Allorea Byers 11/19/86

57. Tonsfeldt Round Barn

Entered in the
National Register

for Keeper
Attest

Allorea Byers 11/19/86

Keeper

Attest

Keeper

Attest

Keeper

Attest