NATIONAL REGISTER OF HISTORIC PLACES ASSESSMENT OF THE WHITE BARN A TRANSVERSE-FRAME/CRIB BARN LOCATED AT TRAIL-OF-TEARS STATE FOREST, UNION COUNTY, ILLINOIS

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This report details the results of a National Register of Historic Places assessment conducted by Fever River Research on a gambrel-roofed, transverse-frame barn located at Trail of Tears State Forest in western Union County, Illinois (see Figure 1). Referred to as the "White Barn", this structure is the only extant building that remains in situ¹ at the site of a farmstead that operated during the period ca. 1870-1929. The barn itself was constructed during the early twentieth century and thus dates to the later stage of the farm's operation. The investigation of the White Barn was requested by the Illinois Department of Natural Resources and involved the following tasks: 1) documentary research on the barn and associated land; 2) a physical examination of the structure in order to assess its age, evolution, and integrity; and 3) a windshield survey of comparative barns in the surrounding area -all of which was necessary to assess the barn's potential National Register of Historic Places eligibility. The area of Union County in which the barn is located is an extension of the rugged Ozark Hills, a region that is characterized by steep, heavily dissected ridges, narrow hollows, and thick forests. The ridges rise 300 to 400 feet above the wide Mississippi River floodplain, which borders them to the west. Historically, this region represented marginal agricultural land and was sparsely populated during the nineteenth century. Between 1929 and 1933 much of the Ozark Hills in Union County was purchased by the State of Illinois and the United States and has since been conserved as state and national forest.

¹ A house associated with the barn was sold by the State of Illinois and relocated a couple of miles to the east during the middle 1980s. This dwelling will be discussed in more detail below.



Figure 1. United States Geological Survey map showing the location of the White Barn in Trail of Tears State Forest (USGS, Jonesboro Quadrangle 1990).

HISTORICAL CONTEXT

Euro-American settlement in what is now Union County began around the year 1809. Settlers no doubt had moved through the limits of the county prior to this date but had been drawn into the less rugged country in nearby Randolph, Monroe, St. Clair, and Madison Counties, which border the Mississippi River to the north of Union. The majority of the earlier settlers in the county were southerners who hailed from the Carolinas, Tennessee, and Kentucky (Perrin 1881:353, 410-11, 415). Union County was formally organized on January 2, 1818. It was comprised of nine full congressional townships and three fractional townships that were segmented by the Mississippi. On March 2, 1818, the town of Jonesboro was laid out to serve as the county seat. Jonesboro occupied an elevation position near the center of the county and approximately ten miles east of the Mississippi River. Commercial growth in the county was fairly limited prior to the 1850s on account of the rugged terrain and limited transportation network found there. Goods moved into and out of the county primarily by way of the Mississippi River. At least two steamboat landings were established in the county (Williams Landing and Sessions Landing), but neither one ever developed beyond a hamlet probably due to their exposed position on the low-lying Mississippi floodplain (Lake 1881; Perrin 1883:336). Jonesboro represented the principal commercial center in the county until the 1850s, when it began to be rivaled by the neighboring town of Anna. Anna was platted adjacent to the Illinois Central Railroad, only one mile east of the county seat, in 1854. Jonesboro apparently had had the opportunity to have the Illinois Central pass through it, but its city fathers inexplicably had failed to arrange the required survey. Jonesboro merchant Winstead Davie seized upon their oversight and surveyed the route of the railroad through land he owned east of town. Davie chose the name "Anna" in honor of his wife (Illinois State Historical Society). The Illinois Central began service through Union County during the summer of 1854. Aside from Anna, the towns of Cobden and Dongola eventually developed along the route of the Illinois Central. In 1875, a second railroad -- the Cairo and St. Louis Narrow Gauge Railroad---started service through Union County. The Cairo and St. Louis ran roughly parallel to, and several miles west of, the Illinois Central and serviced Jonesboro directly. A number of small communities were established along this railroad; these included the towns of Mountain Glen and Alto Pass, which were located north of Jonesboro, and Springville and Mill Creek, located farther south (Parks 1983; Perrin 413-14; Lake 1881) (see Figure 2).

The introduction of rail service completely refigured Union County's exchange network, directing it away from the Mississippi River and New Orleans northward to Chicago and St. Louis. The Illinois Central was particularly instrumental in the development of a commercial fruit and vegetable industry in the county, starting in the late 1850s (Perrin 1883:336; Anna Centennial Committee 1954:37-8). The weather and soils in the county proved to be ideal for the production of a wide range of fruits and vegetables, including apples, peaches, pears, strawberries, blackberries, raspberries, beans, tomatoes, peas, and cucumbers. These products found a ready market in the rapidly growing cities of Chicago and St. Louis. Orchard production also proved advantageous to Union County farmers, in that it allowed them to utilize hillsides that would have proven unsuitable for row crops due to erosion. The county's fruit and vegetable industry continued to grow through the second half of the nineteenth century and into the twentieth century. Cobden served as the principal shipping center, and as late as the 1950s

the town could claim to have shipped more tomatoes annually than any other point in the United States. Horticulture remains a significant part of Union County's economy today (Perrin 1883:334-352; Leonard n.d.:81-6; Anna Centennial Committee 1954:37-9; Parks 1983:1322-6).

Another local industry spurred by Union County's natural geography was lumber production. The county was largely covered by timber at the time of Euro-American settlement, and it remained so well into the nineteenth century. The rugged Ozark Hills, in particular, had extensive timber growth. As of 1875, there were at least two sawmills operating in the vicinity of present-day Trail-of-Tears State Forest. One of these was located one-half mile east of Canedy Creek and was operated by Samuel W. Bryant. The other mill was located along Clear Creek, where it entered the Mississippi River floodplain, and operated by Bell and Messner (Lake 1875). Besides being used for building construction and domestic fuel consumption, the timber was cut to provide cordwood for the railroads and for the manufacture of fruit crates. Commercial lumber production peaked during the 1920s, when there were thirty-two sawmills operating in Union County. The industry declined after 1929, however, due to falling prices and the wide-scale conservation of the county's remaining timber reserves by the state and federal governments (Leonard n.d. 95).



Figure 2. Nineteenth-century map of Union County, Illinois illustrating the location of the White Barn (Lake 1881).

SITE SPECIFIC HISTORY

The White Barn is located on the SW1/4, SW1/4 of Section 8 in Township 12 South, Range 2 West of the Third Principal Meridian. This 40-acre tract was purchased from the United States government on February 18, 1839 by Peter Cable (Union County Land Entry Book:87). Cable retained ownership of the SW1/4, SW1/4 of Section 8 until March 11, 1845, when he and his wife signed a quit-claim deed to the tract --as well to the 40 acres in the NE1/4, SE1/4 of Section 7—to David Lyerle² (Union County Deed Record J9:217-8). Considering that Lyerle paid only \$100 for this acreage (which equaled the government purchase price of \$1.25 per acre). it seems doubtful that the property had been improved to any significant extent during Cable's period of ownership. Geographically, the two tracts were positioned astride two adjacent hollows extending into the uplands bordering the Mississippi River floodplain. These hollows had been carved by tributaries of Clear Creek and were separated from one another by a narrow, heavily dissected ridge rising 200 feet above the hollow floor. Similarly rugged ridges rose along the other sides of the hollows. Although the hollows were much narrower than the Clear Creek valley to the northeast, which was three-quarters of a mile across in places, they still offered approximately 500-700 feet (widthwise) of tillable bottom ground. They were also well watered by their associated streams, although the water-flow through these drainages could be intermittent during the summer months. Despite these advantages, there is no clear evidence of the SW1/4, SW1/4 of Section 8 and the NE1/4, SE1/4 of Section 7 having been developed for agricultural purposes during the middle nineteenth century. The strongest indicator of the tracts' continued lack of improvement is the fact that when Andrew J. Lyerle sold his one-half interest in them to John Lyerle on January 13, 1870, he did so for only \$325 -a figure that hardly suggests that the presence of a farmstead on the property. The relationship of Andrew and John Lyerle to David Lyerle is not known, although it is possible that the former were sons of the latter; if so, the sale of the 120 acres by Andrew to John may represent a division of their father's former landholdings. The date at which Andrew Lyerle acquired legal interest in the property has vet to be determined.

Unlike the owners who had preceded him, John Lyerle established a farmstead on the SW1/4, SW1/4 of Section 8. This farm was in operation by the time the 1870 census was taken, which suggests that John had started improving the farm at least one year (minimally) prior to Andrew Lyerle's signing a quit-claim-deed to the property. The agricultural schedule from the 1870 census lists John Lyerle as owning 122-acres of land with a total value of \$2,800. Only 32 acres were reported being "improved," while the remaining 90 acres were covered with timber. John's agricultural machinery apparently was limited, since it was valued at only \$30. His livestock, which was worth \$390, consisted of three horses, two milch cows, eight sheep, and fifty swine. Crops and products yielded over the course of the year included 236 bushels of winter wheat, 250 bushels of corn, 15 pounds of wool, 2 tons of hay, \$25 worth of market vegetables, and 9 gallons of molasses. The total value of these farm products was estimated at \$485 (U. S. Bureau of the Census 1870:3-4).

² The surname Lyerle is spelled several different ways in the deed records and on county atlases. Variants include: Lyerly and Lyerlie. Since "Lyerle" appears most frequently in the documentary record, we have chosen to use it here for consistency.

Even though Lyerle subsequently increased his overall landholdings, his improved acreage did not increase significantly since the majority of the ground he purchased was too rugged to ever be tilled. Nevertheless, he succeeded in diversifying his crop and livestock production without sacrificing yields in staple crops such as wheat and corn. The 1880 agricultural schedule indicates that he owned 160 acres of land, which were utilized as follows: 36 acres were tilled; 7 acres were covered by an apple orchard with 280 trees; 4 acres were a peach orchard containing 280 trees; 2 acres were permanent pasture or meadow; and 111 acres were covered with timber. His row crop production over the previous year included 420 bushels of corn, 430 bushels of wheat, 80 bushels of oats, 24 gallons of molasses (from 1 acre of sorghum), and 130 bushels of potatoes. He had also harvested 1 ton of hay, 280 bushels of apples (valued at \$10), 50 pounds of honey, and 20 cords of wood (valued at \$40). Lyerle's livestock holdings consisted of one horse, three mules, two milch cows, one head of beef cattle, sixteen swine, and thirty-five chickens. He had dropped eight calves, sold three cattle alive, and slaughtered one other head of cattle for meat. Dairy and poultry products generated over the previous year included 150 pounds of butter and 300 dozen eggs. Lyerle's farm had an estimated value of \$1600 in 1880. This figure covered land, fences, and buildings and was significantly lower than the 1870 estimate of \$2800. In contrast, the value of his farm machinery had increased from \$30 to \$200 between 1870 and 1880, which is not surprising given the diversified agricultural strategy he had adopted during the intervening period. His livestock was valued at \$500. Lyerle reportedly had spent \$40 on the repair of farm buildings and another \$50 for three weeks of hired labor between June 1879 and June 1880 (U. S. Bureau of the Census 1880:5).

The 1880 population schedule lists John Lyerle as a 38-year-old, married farmer who was a native of Illinois. His wife was named Melvina and was 33 years of age. The couple had four sons: Andrew J., age 14, John R., age 12, George W., age 11, and William D., age 8 (U. S. Bureau of the Census 1880:27).

John Lyerle's landholdings are illustrated in the 1881 atlas of Union County (see Figure 3). The atlas designates Lyerle as owning a total of 160 acres of land in Sections 7 and 8 of Township 12 South, Range 2 West. One hundred and twenty of these acres were located in the E1/2, SE1/4 and NW, SE1/4 of Section 7, while the remaining 40 acres were represented by the SW1/4, SW1/4 of Section 8. The only dwelling that the atlas depicts on Lyerle's land is located in the northeastern corner of the SW1/4, SW1/4 of Section 8, lying immediately south of the road that passed through southern hollow. This dwelling is believed to represent the Lyerle family's personal residence.³ John Lyerle is not included in the atlas' directory of patrons for Township 12 South, Range 2 West (D. J. Lake and Company 1881: 31, 49). It is worthy of note that the 1881 atlas designates the majority of acreage in Section 8 as being owned by the Illinois Central Railroad. In 1850, Congress had granted the State of Illinois all of the unclaimed acreage on every even-numbered section or six miles to either side of the rail line, lands that the State had subsequently turned over to the railroad company. Proceeds from sale of these lands were to be used to fund the railroad's construction (Howard 1972:243-4). The fact that the Illinois Central still owned 560 acres in Section 8, as well as thousands of additional acres in the surrounding area, as late as 1881 is indicative of the rugged, marginal character of the uplands in western Union County.

³ The Lyerle family's placement in the census records leaves little doubt that they were occupying this residence.

During the middle-to-late 1880s, John Leyerle significantly expanded his land holdings in Section 8, buying the SE1/4, SW1/4 in 1884, the NW1/4, SW1/4 in 1887, and the NE1/4, SW1/4 in 1888 (Union County Land Entry Book:87). He also eventually purchased the NW1/4, SE1/4 of Section 8. These land purchases had a clear pattern, in that they followed the course of the hollow and seem directed toward acquiring additional acreage on the hollow bottom. By 1908, John Lyerle owned 200 acres in Section 8 and 120 acres in Section 7. A county atlas published that year illustrates a single residence on Lyerle's property, which is shown lying on the southern edge of the NW1/4, SW1/4 of Section 8, north of the road running through the hollow (Ogle 1908:37) (see Figure 4). This residence is positioned father north and on the opposite side of the road than the house illustrated on the 1881 atlas. The discrepancy between the atlases in respect to the residence's location presents a number a possibilities: one, the atlases illustrate two different dwellings and thus show that the Lyerles occupied two generations of housing in the hollow; two, that the road running through the hollow was resurveyed around the house between 1881 and 1908; or three, that neither atlas' representation is entirely accurate and provides only an approximate location for the house. There is strong evidence that the 1881 and 1908 atlases, in fact, illustrate the same dwelling. First of all, neither atlas can be considered precise, as is evidenced by the 1908 atlas' positioning of the road running past the Lyerle residence well north of its actual route. If the road ran where the atlas shows it, it would be running through the hills rather than down in the hollow. Furthermore, the one house that is known to have been located on the Lylere farmstead appears to date to the middle-to-late nineteenth century. This dwelling, which has since been moved from the site, is a 1-1/2-story, side-gabled, frame I-Cottage with a one-story rear kitchen wing. Given its form and the types of materials used in its construction, the house is suspected to date to ca. 1870^4 and to have been constructed in conjuncture with John Lyerle's establishment of the farm.

The I-Cottage is a traditional vernacular house form that is characterized by a one-room deep, two-room wide floor plan and a one or one-and-one-half-story height. Two-story versions of the house-form are referred to as I-Houses. Cultural geographers have particularly identified the I-House with the Upland South cultural region and have noted the house-form's widespread popularity amongst the agrarian middle-class during the nineteenth century. Although often favored by town-based businessmen and professional classes, the I-House was especially prevalent in rural areas, where, according to Henry Glassie (1968:99), it connoted "agrarian stability." One reason cited for the house-form's prestige was its wide, symmetrically arranged facade, which presented up to five bays to the viewer (Jakle, Bastian, and Meyer 1989:118-121; Glassie 1968:98-9). Less affluent farmers often opted to construct the more diminutive I-Cottage. Although smaller than the average I-House and by no means ostentatious, the Lyerle residence nonetheless was fairly commodious (1,282 sq. ft.) and had some refined elements to it, including a three-light transom window over the front entrance and central hallways on both The stairway leading to the second floor was open upstairs and down and had a floors. balustrade with turned newels and balusters. These features are striking when one considers that Lyerle was a comparatively small-scale farmer and that many of his contemporaries were

⁴ A physical examination of the house found that the structure is framed primarily with full-dimensional, circularsawn, white pine stock attached with machine-cut nails. Generally speaking, these materials suggest a middle-tolate nineteenth century date of construction (ca. 1850-1880). Certain aspects of the house's exterior character – windows with six-over-six lights, lack of close or return eaves—suggest this dating as well.

residing in log houses. As such, within this particular geographical region, the I-Cottage house form may have connoted a relatively high status for a farm family.

On September 29, 1911, John Lyerle sold all 320 acres he owned in Sections 7 and 8 of Township 12 South, Range 2 West to his son William D. Lyerle for \$3500. The tracts included in this sale consisted of the SW1/4 and NW1/4, SE1/4 of Section 8 and the E1/2, SE1/4 and NW1/4, SE1/4 of Section 7. Lacking all of the cash necessary for the purchase, William took out a \$1500 mortgage on the properties with John the same day they signed the deed (Union County Deed Record 55:533; Mortgage Record 25:583). In contrast to his father, the farmer, William D. Lyerle was an attorney with a practice in the town of Jonesboro, the county seat of Union County (Ogle 1908: 65) (see Figure 5). During his relatively short period of ownership, William Lyerle may have rented his father's former farm to a tenant farmer. It is possible that William Lyerle was responsible for the construction of the transverse-frame barn now referred to as the White Barn. Less than five years after acquiring the farm, Lyerle was forced to sell it and an additional 360 acres located in Section 17 of the same township (680 acres in all) to Dan R. Davie and Winstead Davie⁵ for \$7,200. Lyerle was compelled to sign a bond-for-deed on these tracts in order to satisfy an \$8,000 debt he owned to the Davies. Six hundred dollars of the \$7,200 sale price was paid up-front in cash, while the remainder was to be paid at a later date. This deed was dated January 29, 1916 (Union County Deed Record 59:90). The Davies retained ownership of the 680 acres they had acquired from William D. Lyerle until August 29, 1929, when Dan R. and Victoria Davie sold the property, plus an additional 40 acres, to the State of Illinois for \$12,000.⁶

The transaction between the Davies and the State of Illinois was but one of series of land acquisitions by the State in 1929 that involved a total of 3,000 acres in the uplands of Townships 11 and 12 South, Range 2 West of Union County. These lands initially were organized as the Kohn-Jackson Forest, but soon after were renamed Union State Forest (Illinois Department of Natural Resources 1998) (see Figure 6). In 1933, the United States government purchased even larger tracts of hill country in Union County as part of the so-called Shawnee Purchase. The Shawnee Purchase involved a total of 794,900 acres of land across southern Illinois and was aimed at wildlife preservation, timber management, and recreational development. The Shawnee Purchase became the foundation for the present-day Shawnee National Forest. During the 1930s, the Civilian Conservation Corps (CCC) established fourteen camps in and adjacent to the Shawnee National Forest (Leonard n.d.:98-9). One of the CCC camps was based at Union State Forest. Work conducted by the CCC at Union State Forest included the development of recreational areas (trails, shelters, picnic grounds, etc.), the harvesting of timber for local and regional CCC construction projects, and the development of the Thompson Tree Nursery (see Figures 7 through 12). The nursery, which was established in 1936, was located within the boundaries of the state forest and was centered on the juncture of the two hollows formerly owned by the Lyerle family. As one of only two state-owned nurseries in Illinois (the other was located at Havana, Mason County), the Thompson Tree Nursery played a major role in the

⁵ The Davie family was one of the most prominent in Union County. The family's scion, Winstead Davie Sr. (1797-1885), was a wealthy merchant in Jonesboro and the founder of the town of Anna.

⁶ The following lands in Township 12 South, Range 2 West were included in this sale: the E1/2, SE1/4 and NW1/4, SE1/4 of Section 7; the SW1/4 and W1/2SE1/4 of Section 8; the NW1/4 and W1/2, NE1/4 and N1/2, SW1/4 and NW1/4, SE1/4 of Section 17.

reforestation efforts undertaken by the Forest Service and the CCC around the state during the 1930s and early 1940s. Ralph Fisher served as the superintendent of the nursery during its first eleven years of operation and laid a firm foundation for the nursery's continued success in the future. By the time Fisher left the nursery in 1947, it was producing anywhere from 10 to 11 million seedlings per year (Fisher 1993).

Except for a period during which Ralph Fisher oversaw both operations, management of the tree nursery and state forest was divided between two superintendents. The superintendent of the nursery occupied a residence that was positioned at the mouth of the northern hollow, overlooking the nursery buildings and fields. This residence was quite old and had been relocated from a site 1-1/2 miles father and renovated for use by the Fisher Family (Fisher 1993). The CCC camp was located to the north of the nursery superintendent's residence, midway up the hollow. The superintendent of the state forest occupied the old Lyerle House, which was located in the southern hollow, one-quarter mile east of the nursery. After the state forest was established, the Lyerle House was moved slightly upslope from its original location, placed on a raised concrete foundation, and significantly renovated (West 2000). Modifications effected to the house included the additions of a sun porch, utility room, and bathroom, the enclosure of an original kitchen wing porch, and the construction of a new side porch (see Figures 13 through 15). The transverse-frame barn associated with the Lyerle House also was remodeled during the 1930s. Aside from having its exterior sheathed with shiplap siding, the barn had two new sets of double doors added on its east side. The barn reportedly was used to shelter draft animals and for general storage during the period that the forest and nursery were being developed (West 2000).

In 1978, Union State Forest was renamed Trail of Tears State Forest in recognition of the tragic trek made by the Cherokee, Creek, and Chickasaw Indians from their southeastern homelands to the Indian Territory of Oklahoma in 1838-9. Some the Indians had traveled through southern Illinois and wintered over in two camps located approximately two miles south of the present-day forest (Illinois Department of Natural Resources 1998). The Lyerle House continued to serve as the forest superintendent's residence into the middle 1980s, after which it was sold to Don Moll and moved to a new location 2-1/2 miles to the east (see Figure 16).⁷ In 1992, the southern third of the White Barn's lower floor was converted into a combination visitor's center and hunter's check station (West 1998, 2000). The remainder of the barn continues to be used for general storage. At present, Trail of Tears State Forest occupies 5,114 acres of land. The Thompson Tree Nursery has since been renamed Union State Nursery and remains one of only two state-run plant propagation centers in Illinois (Illinois Department of Natural Resources 1998).

⁷ The house currently sits on the north side of State Forest Road, immediately west of the latter road's junction with Illinois Route 127.



Figure 3. Detail from the 1881 atlas of Union County showing John Lyerle's landholdings in Sections 7 and 8 of Township 12 South, Range 2 West (Lake 1881). The structure shown in the SW1/4, SW1/4 of Section is believed to represent the Lyerle family's home.



Figure 4. Detail from the 1908 atlas of Union County showing John Lyerle's land holdings in Sections 7 and 8 of Township 12 South, Range 2 West (Ogle 1908).



Figure 5. Ca. 1908 photograph of Jonesboro attorney William D. Lyerle. The youngest son of John Lyerle, William purchased his father's farm in 1911 and retained ownership until 1916.



Figure 6. Map showing the boundaries of Union State Forest as of 1935 (Illinois Department of Conservation 1935).



Figure 7. Detail of a United States Geological Survey topographic map revised in 1943, showing the area around the White Barn (USGS 1943). Key structural features have been labeled.



Figure 8. Detail of a 1947 United States Geological Survey topographic map, showing the area around the White Barn (USGS 1947).



Figure 9. Entrance gate to the Thompson Tree Nursery, ca. 1940. The nursery office and superintendent's residence appear in the background (Union State Nursery Photographic Collection).



Figure 10. View of the Thompson Tree Nursery, looking north, ca. 1940. The nursery buildings appear in the foreground. Located in the distance, farther up the hollow, is the CCC camp (Union State Nursery Photographic Collection).



Figure 11. One of the log shelters erected by CCC personnel at Trail of Tears State Forest (then named Union State Forest) during the 1930s (ca. 1940). This shelter is representative of the rustic-style architecture utilized by the CCC at parks and forests elsewhere in Illinois and around the nation (Union State Nursery Photographic Collection).



Figure 12. One of the stone fire-pits constructed by the CCC at Trail of Tears State Forest (ca. 1940) (Union State Nursery Photographic Collection).





Figure 13. Two views of the White Barn and Lyerle House, looking northeast, ca. 1940. By this time, the Lyerle House had been moved upslope from its original location and renovated for use by the superintendent of the state forest (Union State Nursery Photographic Collection).



Figure 14. View of the Lyerle House ca. 1940, looking northwest, after its relocation and renovation for use as the superintendent's residence. The sunroom on the west and side porch on the east were added as part of the renovation (Union State Nursery Photographic Collection).



Figure 15. View of the rear of the Lyerle House, ca. 1940 (Union State Nursery Photographic Collection).



Figure 16. View of the Lyerle House at its present location, east of Trail of Tears State Forest. (2000) The house was moved from the forest during the middle 1980s. It presently is unoccupied.

ARCHITECTURAL CONTEXT

The White Barn is a variant of a barn-form that is alternately referred to by cultural geographers as transverse-frame and/or transverse-crib, and occasionally is referenced in local vernacular as three-alley or three-portal barns.⁸ The term "transverse" refers to the orientation of the barn's interior divisions, which are aligned parallel to the ridgeline of the roof. Other key elements that define the barn-form are its front-facing gable or gambrel roof, three-aisle interior division on the lower story, upper-story hayloft, multi-functional use, and a rectangular footprint with a larger depth/length versus width. The "aisles" are represented by two rows of cribs and animals stalls, which are located along the sides of the barn, and a central runway. The cribs function as grain and equipment storage areas, while the stalls accommodate draft animals (horses, mules) and/or cattle. Access to the cribs and stalls is provided by the central runway, which extends the full length of the building and has doors at each of its end (Jordan-Bychov 1998:7-8; Sculle and Price 1993:13-19). Jordan-Bychov (1998:7) describes the runway in a transverse-frame/crib barn as being designed to accommodate wagons and as serving as an ancillary work area for activities such as grain processing. Although the majority of transverseframe/crib barns do fit this model, a subtype of the barn-form has a raised walkway, rather than a drive, running down its center. Barns having this design do have driveways, but they are positioned in wings that run parallel to the central, three-aisle core of the barn; they thus expand the traditional three-aisle arrangement to five aisles. The White Barn is one example of this subtype, which Noble (1984:13-4) has designated as a "Type 2 Midwest three-portal barn" (in reference to the three doorways in the gable/gambrel ends).⁹ Shed-roofed additions are also common on those transverse-crib barns that have a central driveway. These wings might serve as animal loafing sheds, be used for equipment storage, or function as covered loading drives for the grain cribs located on the interior of the barn. Haylofts in transverse frame/crib barns typically are quite commodious --particularly in those barns with gambrel roofs-- and often have a gable-roof extension, known as a "hay bonnet" or "hay hood", that projects over the mow door. Hay bonnets are associated with a hayfork lift system and allowed the fork to extend beyond the wall plane of the barn, drop down into a wagon filled with loose hay, and then carry a load up into the loft.¹⁰ Noble (1983:6-7) notes the prevalence of hay bonnets on "barns derived from the crib form" and associates the feature with southern barns, which he describes as being "more apt to be loaded from the outside through a loft door than are barns in the northern part of the country, where tripartite structure are covered by open interior lofts." Trap doors in the floor of the hay loft allowed the hay to dropped to the lower floor and thence distributed as fodder to the animals sheltered there. The method of construction found on examples of transverse-frame/crib barns can vary between log, timber-frame, and plank-frame. Roofs can be either gable or

⁸ Price and Sculle (1993:13) note the use of the vernacular term "three alley" to describe transverse-frame barns in their study of barn types in Hardin County, Illinois.

⁹ Noble (1984:13-4) defines a transverse-frame barn that has a central driveway and two side driveways as a Type 1 Midwest three-portal barn.

¹⁰ Hayforks were propelled along their track by a rope that was attached to a horse positioned at the opposite end of the barn from the hay bonnet. After the fork had seized its load, the horse was moved away from the barn, thus propelling the hay upward and into the loft. Hayforks significantly reduced the manual labor involved in "forking" loose hay into a loft.

gambrel. There is also considerable variation in respect to size (Jordan-Bychov 1998:13-16). Structural description aside, Jordan-Bychov (1998:8) notes that the transverse-frame/crib barnform is defined *functionally* by the "three-fold combination of granary/haymow/stall." He thus distinguishes the barn type from the similarly shaped, but less multifunctional, drive-through corncrib.

Culturally, the transverse-frame/crib barn has been identified as an Upland South building tradition. Jordan-Bychov postulates the barn-form's origin in the Watauga region of northeastern Tennessee during the 1790s and has documented its subsequent spread -in varying densities-across much of the South and southern Midwest. He observes that, "the multifunctional transverse-crib barn served beautifully many of the needs of the diversified, semi-subsistence mixed-farming system of the traditional Upland South" (Jordan-Bychov 1998:10, 16-19, 24). Sculle and Price (1993) also note the Upland South origins of the barn in their study of barn types in Hardin County, Illinois. Located along the Ohio River in southeastern Illinois, Hardin County was settled predominately by emigrants from Kentucky, Tennessee, and North Carolina, and hence represents an extension of the Upland South, in respect to its material culture. One hundred of the 163 barns documented by Sculle and Price during their survey were classified as transverse-frame. In addition, they found eighteen barns with gambrel roofs that were built around a traditional transverse-frame floor plan (having three alleys), which they classified as "Gambrel Barns" in order to distinguish them from the earlier, and more predominant, gable-roofed transverse-frame barns they had documented. Sculle and Price note that gable-roofed transverse-frame barns "became popular during Hardin County's brief agricultural boom in the late nineteenth century when expanded feeding and sheltering was required for mules and horses raised for sale." The gambrel-roofed examples found during the survey post-dated 1920 and represented "the last of the traditional barns" to be constructed in the area. Their popularity derived from the greater space their dual-pitched roofed allowed for hav storage (Sculle and Price 1993:5, 13-20).

The White Barn varies from the basic transverse-frame barn-form in several important respects. For one, the central aisle on the first floor of the barn was built to accommodate a raised frame walkway, rather than a driveway (see sectional views included as Figures 23 and 24). Thus, on its exterior, the barn has a common access door --measuring approximately 3' wide-- in the center of its north and south elevations, instead of the wide double doors that are usually found in those barns with a central drive. Another aspect that sets the White Barn apart is the fact that it was constructed with two side wings. As mentioned earlier, side wings are quite common on transverse-frame barns, but they typically represent later additions, rather than an integral component to the original barn design. With the wings, the barn has five aisles on its lower floor, as opposed to three, and has a nearly square footprint. The structure measures 48'-7" wide (east/west) and 50'-4" long (north/south). Floor plans and sectional views of the White Barn are included as Figures 21 through 24.

Functionally, the first floor of the barn originally served as a loafing and feeding area for livestock. The side wings served the same role as the central drive did in other transverse-frame barns, in that they allowed livestock (and wagons, if necessary) to the moved in and out of the building. Double doors were located at the north and south ends of the wings, allowing unobstructed movement along the full length of the barn. The exposed long walls of the wings

were fully framed-in, and, on the interior, these walls had vertical planking along their lower extent -presumably to prevent livestock from brushing up directly upon the frame and exterior siding (see Figure 27). The side wings had an interior width of 8'-6" to 8'-8." The aisles flanking the wings were each divided into five stalls and storage cribs. Since these units were positioned to correspond to the posts forming the lower part of the barn bents, they were fairly uniform in respect to size (9'-2"x10'-6", on average). Determining the exact arrangement of the crib/stall aisles in the barn as it currently exists is complicated on account of the original partition walls having been removed (see Figures 28 and 29). Based on the nail patterns observed on the posts and girts, however, it appears as though the western aisle had three stalls on its north end and two cribs on the south. The eastern aisle seems to have been divided into four stalls and a single crib located on the south end. Fragments of the narrow, horizontal strips found on the posts demarcating the northern of the two cribs in the western aisle suggest that this crib once held ear corn.¹¹ If the compartment did serve as a corn crib, it probably had two doors associated with it: a raised door on the west, facing the covered drive, through which it could be filled; and a floor-level door on the east, from which corn could be drawn and distributed to the animals feeding in the stalls. The fact that the southern cribs in each aisle had a window in their south wall suggests that they may have been intended for general storage, rather than for holding bulk grain. The stalls were framed with horizontal nailers laid between the bent posts and most likely sheathed with vertical planking. Nail patterns suggest that each of the seven stalls had a gate (measuring 3'-0" to 3'-2" wide) along their wall that faced the side driveways. It is uncertain whether the stalls were used only for feeding or also as loafing areas. In contrast to the dirt floor found in the rest of the barn, the central aisle had a finished floor that was raised several feet above the ground surface. The aisle, which measured 7' wide between the posts, could be entered through a common door at both ends. These doors were each flanked by a window. The central aisle principally functioned as a runway from which feed and fodder could be easily distributed to the adjacent stalls. Corn could be drawn from the adjacent crib(s), while hay could be drawn down from the upper loft via a trap door located at the north end of the aisle. The upper-story of the barn was spacious, unobstructed, and used exclusively for hay storage. Hay was drawn into the loft by means of hayfork, which ran along a track that was suspended from the ridge of the roof. A large mow door, protected by a hay bonnet, was located on the north side of the barn. Two windows were located in each of the gambrel-end walls. Ladders at each end wall provided access to the upper portion of the loft.

Structurally, the White Barn represents a mixture of traditional and modern building techniques. All of the framing stock that is original to the barn is circular-sawn oak that is not surfaced on any side (rough four sides). This lumber was likely procured from a local sawmill exploiting Union County's abundant hardwood resources. Contrasting with this conservative use of locally procured, oak lumber is the use of poured concrete for the barn's perimeter foundations and interior footings. The use of concrete for foundation materials was becoming commonplace by circa 1910, even among the farmers of western Union County. The barn's framing also presents an interesting dichotomy of the old and new. The core frame of the building follows traditional timber-frame construction, in that it uses heavy, full-dimensional 6"x8" posts and girts connected with mortise and tenon joints. Yet, the framing materials used

¹¹ The typical corn crib was framed with spaced, horizontal slats running between vertical studs or posts. The spacing between slats (which was allowed by the large size of the ears) facilitated ventilation and hence speeded the drying of the corn. Smaller grains such as wheat and oats were held in bins framed with close-set planks.

are all sawn stock and the joints are seated with wire-drawn nails rather than with wood dowels. By this time period, the more laborious treenail was replaced with a modern wire-drawn nail (which had become common by the first decade of the twentieth century). Similarly, the corner bracing utilized (which employs both 4"x4" and 1-1/2"x7-3/4" stock) is nailed in place, rather than mortise-and-tenoned (see Figures 25 and 26). As such, it appears that the craftsmen that constructed this barn utilized traditional techniques that had been slightly modified by the introduction of new materials (wire drawn nails, concrete) during the early twentieth century.

The steeply pitched gambrel roof is framed with 2-1/2"x5" rafters set 2'-0" on-center that are self-supporting and do not require purlins. The dual pitch that defines the roof form is created by using two sets of rafters. The lower rafters have a steeper slope and begin from a 6"x8" plate; they are butted to the upper rafter rafters and joined to them by means of brace. The upper rafters meet at narrow (1"x6"?) ridge board. The roof is covered with 1"x4" sheathing and corrugated steel roofing. Based on the wide spacing of the sheathing (1'-8" on-center), the barn appears to have always had such roofing, rather than wood shingles. The floor of the loft is framed with 2"x8" joists set 2'-0" on-center and irregularly sized flooring that varies in size between 1"x8" and 1"x11-1/2". The framing in the side wings is different from the central core of the barn. The walls of the wings are framed by 6"x6" posts that rest on a 4"x8" sill and have 4x4" and 4"x6" horizontal nailers running between them. Running above the wall posts is a 6"x6" plate carrying 2"x3-1/2" rafters set 2'-0" on-center. The ceiling joists in the side wings measure 2"x5" and are supported by a 2"x5" ribbon. The exterior of the barn originally was sheathed with vertical plank siding of variable width but generally measuring 1"x8". This siding remains intact but has been overlaid with horizontal shiplap siding that was applied by the CCC during the 1930s.

The materials used in the construction of the White Barn indicate that it was most likely constructed during the first decades of the twentieth century (ca. 1900-1920). Key indicators of this dating are the use of wire-drawn nails and poured-concrete foundations and footings. Wire-drawn nails utilized for building construction began to be mass marketed in the United States during the 1880s, but their sales failed to overtake machine-cut nails until the 1890s, and even then, machine-cut nails continued to be used by more conservative-minded builders for several decades longer (Nelson 1968). Similarly, the use of concrete for such small-scale building projects as barn foundations and footings –although by no means unheard of during the late nineteenth century— was largely a twentieth-century phenomenon in association with the dramatic growth of the Portland cement industry after about 1898 (Radford 1910:2, 15-18).



Figure 17. View of the White Barn, looking east up the hollow in which it is located (2000). The Lyerle House formerly stood on the slope that rises to the left of the view.



Figure 18. View of the south and west elevations of the White Barn. Except for the lowering of the central doorway on the south and the addition of shiplap siding around the exterior, these elevations retain their historic character.



Figure 19. View of the east and north elevations of the White Barn (2000). The two sets of double doors on the east elevation originally were added during the 1930s and have since been remodeled. Note the large hay bonnet on the north.



Figure 20. View of the north elevation of the White Barn (2000). The door and window openings on the first floor of this elevation have been closed-off. The rear stairway is a fairly recent addition.



Figure 21. First floor plan of the White Barn, as originally constructed. Dashed lines indicate features that are believed to have been present but have since been removed.



Figure 22. First floor plan of the White Barn, showing existing conditions.



Figure 23. Sectional view through the White Barn, looking north. The raised walkway in the central aisle (which is no longer present) has been pictured. The stalls that originally flanked the walkway have not been pictured.



Figure 24. Sectional view through the White Barn, looking south. As in the previous illustration, the raised walkway has been pictured, but the stalls and cribs flanking have not.



Figure 25. Detail of the framing utilized on the first floor of the White Barn (2000). This view shows the juncture of a post and girt in the central core of the barn.



Figure 26. Detail of the juncture of a post and rafter plate in the central core of the barn (2000). The brace that runs diagonally down from the post extends through the floor and ties into one of the hayloft floor joists.



Figure 27. Remnants of the plank siding lining the interior of the western driveway in the White Barn (2000). The same type of planking was likely used to frame out the stalls in the barn.



Figure 28. View of the lower ends of two of the posts lining the central aisle in the barn (2000). The blocks on the which the posts are resting actually represent sections of a sill plat that was cut out when the raised walkway was removed. Nail and "ghost" patterns found near the base of the posts indicate the location of the floor joists that formerly carried the walkway.



Figure 29. The stud fragment running along the left side of the air conditioner in this view formerly framed in one of the cribs in the barn (2000). The other studs framing the cribs and stalls have been removed. The stud shown here has been notched around the diagonal "knee" brace that runs between the post and girt.



Figure 30. While the White Barn is structurally sound on the whole, it does present a number of structural concerns. The most serious of these is the deterioration of the ribbons that carry the upper story floor joists in the side wings. This view shows a damaged section of ribbon in the east wing (2000).

RESULTS OF SURVEY

A windshield survey was conducted over portions of six congressional townships in western Union County in order to identify extant examples of transverse-frame barns. The survey emphasized the Ozark Hills region in order to find barns with a similar geographic setting as the White Barn. However, portions of the Mississippi River floodplain were also surveyed, as were segments of the less rugged hill country that lies to the east of the Ozark Hills. The townships most thoroughly covered were Townships 11, 12, and 13 South, Range 2 West. As is typical of windshield surveys, the coverage provided by the survey was limited to those buildings within clear view of public roads. There is no doubt a certain percentage of barns in the survey area that were not documented, on account of their being completely hidden from view or located too far off the public road for their form to be readily identified. This problem was mitigated to some extent, however, by the rugged character of the terrain and the fact that a large portion of the survey area is national forest (and hence has been depopulated). Most of farmsteads in the survey area were located in the same narrow valleys that the public roads passed through. Even when a barn was positioned close to the road, however, their interior layout could not always be ascertained with complete assurance.

Despite the restrictions imposed on the windshield survey, fourteen barns that clearly fit the transverse-frame form were identified. Thirteen of these follow the classic transverse-frame plan of a central driveway flanked by stalls and cribs. Ten of the fourteen have gambrel roofs, while the remaining four have gable roofs. There was only one barn identified in the survey definitely that has a raised central walkway like that found in the White Barn. This barn has a gambrel roof and will be discussed in more detail below. An additional ten barns were identified during the survey that might possibly be transverse-frame but could not be conclusively identified as such; two of these may have a raised central walkway. Five of the ten potential transverse-frame barns have gable roofs, while the other five have gambrel roofs (see Figure 31).

There is considerable variety in the number and function of the side wings found on these barns. Some of the transverse-frame barns identified had no wings, while others had one or two. In most instances, the wings serve as enclosed driveways that might also double as machine sheds. A few of the barns have wings that are open sided and serve as loafing sheds for cattle. An inventory of the barns documented by the windshield survey has been attached to this report as Appendix I.

The largest concentration of transverse-frame barns found during the survey is located in the Clear Creek valley, which lies immediately west of Trail of Tears State Forest. Five transverse-frame barns and two other barns potentially fitting the form were identified in the lower valley within two miles of one another (see Figure 32). One of these structures is known as the Lloyd Smith Barn and represents a smaller version of the White Barn (see Figures 33-36). The Smith Barn has a raised central walkway that is flanked on one side by a row of cattle stalls and on the other by a row of storage cribs. The upper-story hayloft is accessed via a corner stairway. Shed-roofed wings extend around the north, south, and west sides of the barn. The south wing is open sided and serves as loafing shed in association with the stalls inside the main part of the barn. The north wing and west wings serve as covered driveways and can also be used for equipment storage. The framing in the Smith Barn is also very similar to the White Barn. The current owners believe the barn to have been constructed by Lloyd Smith "about fifty years ago" (Randalls 2000)



Figure 31. Map showing the locations of transverse-frame barns found during the windshield survey. The circles indicate barns identified as transverse-frame (including the White Barn), while the squares designate barns that are potentially transverse-frame.



- Wilson Farms Barn (No. 5)
- Figure 32. Transverse-frame barns located in the Clear Creek Valley, west of Trail of Tears State Forest. This group is representative of the variety found in the barn type in western Union County.

White Barn Trail of Tears State Forest



Figure 33. View of the front side of the Lloyd Smith Barn (2000; Survey No. 10). Although smaller in size, structure has a similar design and framing system to the White Barn.



Figure 34. View of the rear side of the Lloyd Smith Barn (2000). The side and rear wings serve as covered driveways that can also be used for equipment storage.



Figure 35. Detail of the framing found in the Lloyd Smith Barn (2000). The double bracing utilized between the posts and girts resembles that used in the White Barn.



Figure 36. View of a transverse-frame barn (Survey No. 26) that is located on Lingle Road, north of the village of Mill Creek, in southwestern Union County (2000). This barn has a central driveway and no side wings. The stalls and cribs in this barn are still intact.

CONCLUSIONS

A historic property's significance is determined by its eligibility to the National Register of Historic Places. Eligibility to the National Register of Historic Places is based on four broad criteria that are defined by the National Park Service and used to guide the evaluation process. These criteria state that, "the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and"

A) that are associated with events that have made a significant contribution to the broad patterns of our history; or

B) that are associated with the lives of persons significant to our past; or

C) that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose component may lack individual distinction; or

D) that have yielded, or may be likely to yield, information important in prehistory or history.

When the National Register assessment of the White Barn was initiated, the structure's significance was considered most likely to fall under Criteria A (History) and/or C (Architecture). Criterion B (Significant Persons), although not ignored, seemed less likely to apply given the little that was known of the barn's history prior to its purchase by the State of Illinois in 1929. This initial assessment was subsequently borne out by the documentary research that was conducted on the property. The Lyerle family receives scant mention in the published histories and atlases of Union County. The barn's potential applicability under Criteria A related to its original use as a multi-purpose agricultural outbuilding and the structure being representative of early-twentieth-century farming activity in the Ozark Hills region of Union County, prior to the large-scale conservation of that area as state and national forest. The structure's possible significance under Criterion C revolved around it being a good, surviving example of a transverse-frame barn.

Under both Criterion A and C, the White Barn's significance hinges upon its integrity and relative uniqueness locally. Unfortunately, the barn fails to meet either test. While the barn is unique within the limits of Trail-of-Tears State Forest,¹² it appears less so when viewed at either the township or county level. The results of the windshield survey demonstrate that the transverse-frame barn-form was fairly popular in western Union County during the late nineteenth and early twentieth centuries. The survey documented fourteen extant transverseframe barns and ten other barns that potentially share that same form (numbers which represent

¹² Several other barns were once located on forest property, but have been torn down. One of the destroyed barns was located west of the White Barn, opposite the nursery superintendent's residence, and was razed in the 1950s (West 2000, Baker 2000).

only a portion of the total originally built in the area). Although some of the barns identified during the survey are located as far as eight miles south of the White Barn, there is a large cluster of them nearby it, along Clear Creek and the bluff-line bordering the Mississippi River floodplain. The White Barn does stand out as one of the handful of transverse-frame barns in the survey area that had a raised central walkway (which is no longer extant), as opposed to a central drive, and has identical side wings integrated into its original design. Furthermore, it is the largest (and potentially oldest) example of this subtype. The barn's potential eligibility to the National Register, however, is comprised by its comparatively poor integrity. While the White Barn retains its original shape and footprint, the structure has experienced considerable modifications on its exterior and interior since the 1930s. The exterior of the structure has been sheathed with shiplap siding, thus obscuring its original vertical plank siding. Additionally, two vehicle doors have been added on the east elevation, and the original doors and windows on the north elevation have been closed-off. Even though these modifications have not altered the barn's exterior form, they do impact its integrity. Much more significant, however, are the radical changes that have been made on the interior of the structure's lower story. The stalls and cribs on the lower floor of the barn have been removed, as has the raised walkway; these are features that define the original use of the barn as well as its typology. Similar interior "guttings" were evident on some of the transverse-frame barns that were identified in the survey and are not surprising, for they are indicative of the changing modes of farming over the course of the twentieth-century. Stalls and grain bins designed for the shelter and feeding of draft horses have been torn out to create unobstructed space for tractors and farm implements. Interior partitions have also become more susceptible to being torn out as barns have become less multifunctional and designed for a single purpose, such as the storage of large, rolled hay bales. Nonetheless, there were a number of barns documented in the survey that have retained their original interior layout and thus have better overall integrity than the White Barn. Of these, the Lloyd Smith Barn (Survey No. 10; shown in Figure 33-34) is the most comparable to the White Barn –albeit smaller and of a later date. Two other examples that appear to have excellent, or good, integrity are the Pratt Barn (Survey No. 8, shown in Figure 30), which is located a short distance south of the Smith Barn, and the barn identified as Survey No. 26 (shown in Figure 34), both which have central driveways.

The White Barn could also be evaluated under National Register of Historic Places Criterion D (archaeology). The barn does represent a contributing feature to a known historic archaeological site: namely, the farmstead to which it was associated. Although the limits (and subsurface integrity) of this site have not been established through archaeological testing, the documentary record provides the broad dates for the site's period of use as a farmstead (ca. 1870-1929), its ownership history, and record of its agricultural production. When the White Barn is viewed as a feature at this archaeological site, with its intact walls and telltale signs of interior partitions (and thus use), the White Barn has a relatively high degree of integrity (as compared to other archaeological sites where no above-ground structural remains are present). With this in mind, the White Barn has the potential to offer a wide range of information regarding the agricultural strategies and activities implemented on the farmstead during the early twentieth century. Besides the above-ground data already recorded by the current research (which has focused on the plan, construction techniques, and materials used in the construction of the building), subsurface features that might be present within its footprint and immediately surrounding it could contribute additional information relating to the use of the structure. The

significance of these data sets cannot be reasonably assessed, however, when they are viewed in isolation and without an understanding of the archaeological site as a whole. While it is reasonable to speculate that the archaeological data recovered from the farm site might contribute significantly to our understanding of agriculture and rural lifeways in the hill country of Union County and southern Illinois, any assessment of the site's eligibility to the National Register under Criterion D is impossible without first testing the subsurface archaeological resources present on the remainder of the site (both the domestic and agricultural components). Such a testing strategy was not included within the scope of this project. Nonetheless, we do not feel that the barn, standing alone, meets the requirements of Criterion D.

In conclusion, much has been learned about the White barn, its associated farmstead, and the families that built and utilized this structure in their everyday agricultural pursuits. The traditional history conducted during the course of these investigations have given us new insights into the farm families that occupied this site, as well as the agricultural items produced at this farm. Although John Lyerle constructed a relatively plain I-Cottage for his farmhouse during the late nineteenth century, this structure was large compared to the small frame and log cottages occupied by many of his contemporaries. The presence of this house form at this farmstead implies that this farm family was drawing on traditional ideas of what constitutes a proper house. Although I-Cottages are often associated with less successful farm families within the academic literature (and within more agriculturally-rich districts of Illinois), within this particular setting the I-Cottage connotes a relatively successful farm family. The detailed physical survey of the barn -which is a large non-portable artifact- also has given us insights into the character of these families. Although constructed using traditional building techniques (heavy timber construction utilizing mortise and tenon joints) the builders were adapting to the introduction of new materials (concrete and wire-drawn nails) that had only recently come onto the market.

Although we have learned considerably about the farmstead and the family that occupied it, several questions remain unanswered. One research question that needs to be addressed -one that archaeology might be able to address-- is how the White Barn fits into the site structure. Did it represent the only major agricultural outbuilding on the farm after being built, or was it simply the largest of an array of barns and specialized outbuildings? Furthermore, we need a better understanding of when the barn was built and who was responsible for its construction. Even though the barn was likely constructed during the early twentieth century, it is not known with certainty whether it was John Lyerle, his son William, or the Davies family who built it. The answer to both of these questions significantly affects how one interprets the development of the site and socio-economic status -- and perhaps world-view-- of its occupants. If it was John Lyerle who built the White Barn, he might be viewed as a small-scale, but successful, farmer who was progressive enough to construct a relatively large "modern" barn near the end his active career as a farmer -an impression that might be either reinforced or challenged by the domestic component of the site. The barn obviously would have less significance in understanding the Lyerle family's occupation of the farm if it were constructed after John Lyerle sold out in 1911, though it would contribute to interpreting the tenant occupancy of the site that is presumed to have occurred after that date.

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APPENDIX I INVENTORY OF BARNS DOCUMENTED DURING WINDSHIELD SURVEY (See Attached Map for Locations)

NO.	LOCATION	TRANSVERSE-	CENTRAL	ROOF	HAY	WINGS	INTERIOR
		FRAME	AISLE		BONNET		INTEGRITY
1	SW ¼, Sec. 17, T. 11 S., R. 3 W.	Yes	Driveway	Gambrel	No	2 side	Unknown
2	SW ¹ / ₄ , Sec. 21, T. 11 S., R. 3 W.	Yes	Driveway	Gambrel	Yes	2 side (loafing shed, machine shed)	Good
3	NE ¼, Sec. 3, T. 12 S., R. 3 W.	Yes	Driveway	Gambrel	Yes	2 side (loafing sheds)	Good
4	SW ¼, Sec. 12, T. 12 S., R. 3 W.	Yes	Driveway	Gable	Yes	1 side (covered drive)	Unknown
5	SE ¼, Sec. 12, T. 12 S., R. 3 W.	Yes	Driveway	Gambrel	No	2 side (loafing shed, milking shed?)	Good
6	SE ¼, Sec. 12, T. 12 S., R. 3 W.	Unknown	Driveway	Gambrel	No	1 side, 1 rear	Unknown
7	NW ¼, Sec. 7, T. 12 S., R. 2 W.	Unknown	Unknown	Gambrel	Yes	Unknown	Unknown
8	NW ¼, Sec. 7, T. 12 S., R. 2 W.	Yes	Driveway	Gable	Yes	2 side (machine sheds?)	Good
9	SW ¼, Sec. 6, T. 12 S., R. 2 W.	Yes	Driveway	Gambrel	Yes	1 rear (modern, hay storage)	Unknown
10	NW ¼, Sec. 6, T. 12 S., R. 2 W.	Yes	Raised Walkway	Gambrel	Yes	2 side, 1 rear (loafing shed, covered drives)	Good
11	SW ¼, Sec. 31, T. 11 S., R. 2 W.	Yes	Driveway	Gambrel	Yes	2 side, 1 rear	Unknown
12	NW ¼, Sec. 15, T. 11 S., R. 2 W.	No		Gambrel	Yes	None	Unknown
13	SE ¼, Sec. 9, T. 11 S., R. 2 W.	No		Gambrel	Yes	2 side	Unknown
14	SW ¼, Sec. 9, T. 11 S., R. 2 W.	No		Gambrel	Yes	2 side	Unknown

NO.	LOCATION	TRANSVERSE- FRAME	CENTRAL AISLE	ROOF	HAY BONNET	WINGS	INTERIOR INTEGRITY
15	SE ¼, Sec. 5, T. 11 S., R. 2 W.	Unknown	Unknown	Gable	No	2 side	Unknown
16	NE ¼, Sec. 22, T. 12 S., R. 2 W.	No		Gambrel	Yes	1 side	Unknown
17	SW ¼, Sec. 14, T. 12 S. R. 2 W.	Unknown	Unknown	Gable	Yes	2 side	Poor
18	NE ¼, Sec. 30, T. 12 S., R. 2 W.	Unknown	Raised Walkway (?)	Gambrel	Yes	2 side (machine sheds)	Unknown
19	NW ¼, Sec. 30, T. 12 S., R. 2 W.	Yes	Driveway	Gable	Yes	1 side (modern, machine shed)	Unknown
20	NW ¼, Sec. 25, T. 12 S., R. 3 W.	No	Driveway	Gambrel	No	2 side	Unknown
21	NE ¼, Sec. 27, T. 12 S., R. 2 W.	Yes	Driveway	Gambrel	Yes	2 side, 1 rear (machine sheds)	Poor
22	NW ¼, Sec. 26, T. 12 S., R. 2 W.	No		Gable	No	2 side	Unknown
23	SW ¼, Sec. 35, T. 12 S., R. 2 W.	Unknown	Unknown	Gambrel	Yes	2 side, 1 rear	Unknown
24	NW ¼, Sec. 7, T. 13 S., R. 1 W.	Unknown	Unknown	Gambrel	Unknown	Unknown	Unknown
25	NW ¼, Sec. 18, T. 13 S., R. 1 W.	Yes	Driveway	Gable	Yes	1 side	Unknown
26	SW ¼, Sec. 30, T. 13 S., R. 1 W.	Yes	Driveway	Gambrel	Unknown	None	Good
27	NE ¼, Sec. 26, T. 13 S., R. 2 W.	No (log)		Gable	No		
28	SW1/4, Sec. 26, T. 13 S., R. 2 W.	Unknown	Unknown	Gable	Yes	2 side	Unknown
29	NE ¹ / ₄ , Sec. 26, T. 13 S., R. 2 W.	Unknown	Unknown	Gable	Unknown	2 side, 1 rear	Unknown
30	NW ¹ / ₄ , Sec. 3, T. 13 S., R 2 W	Yes	Driveway	Gambrel	Yes	2 side, 1 rear	Unknown
31	NE ¼, Sec. 11, T. 13 S., R. 2 W.	Unknown	Raised Walkway (?)	Gable	Yes	2 side, 1 rear	Unknown

