Protection of Historic Sites

Almost a century ago, Congress passed the first of many laws protecting archaeological sites, both historic and prehistoric, on federal property. Today these laws apply to all public land and, in specific circumstances, to private land as well. The Illinois Historic Preservation Agency is responsible for the administration of these laws.

The Archaeological and Paleontological Resources Protection Act. This law became effective on January 1, 1989 and applies to all public land in Illinois. The law contains criminal sanctions for those who disturb burial mounds, human remains, shipwrecks, or other archaeological resources as well as fossils on public land. This law requires a permit for legitimate scientific study. Under this act, objects found on public lands are sent to the Illinois State Museum in Springfield.

Human Grave Protection Act. Effective August 11, 1989, this law forbids disturbance of human skeletal remains and grave markers in unregistered cemeteries, including isolated graves and burial mounds that are at least 100 years old. Another law protects younger graves and registered cemeteries. It is the intent of this law that "all human burials be accorded equal treatment and respect for human dignity, without reference to ethnic origins, cultural backgrounds or religious affiliations."

The Illinois State Agency Historic Resources Protection Act. Agencies of Illinois government are required to notify the Illinois Historic Preservation Agency of any undertaking that may adversely affect an archaeological property (historic or prehistoric). The Historic Preservation Agency may require survey and testing of resource areas. This law became effective January 1, 1990. **amended.** This Federal statute authorizes the National Register of Historic Places, establishes the Advisory Council on Historic Preservation, and under Section 106, the Council's powers to review Federal undertakings that affect historic properties.

Protecting Archaeological Sites

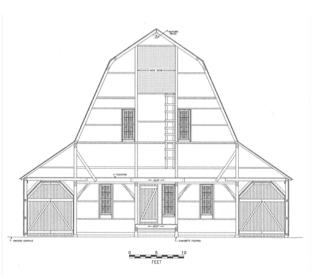
The Illinois Department of Natural Resources owns and manages thousands of archaeological sites on land it oversees. The Archaeological and Paleontological Resources Protection Act protects these sites and the artifacts contained within them from looting and vandalism. It is illegal for anyone to either collect or engage in digging into an archaeological site on public land. Although prohibited by law, the looting of sites is a serious problem.

If you notice illicit digging at an archaeological site or witness someone collecting artifacts on a site at a state park, the Department of Natural Resources asks you to contact either the local park superintendent or the IDNR Cultural Resources Coordinator at (217) 782-3715 so that measures can be taken to protect the site.

For information about Trail of Tears State Forest, contact the site superintendent at (618) 833-4910.



The White Barn, Trail of Tears State Forest, Union County, Illinois



7-03

The White Barn is a gambrel-roofed, transverseframe barn within Trail of Tears State Forest, western Union County, Illinois. It was constructed during the early 20th century on a farmstead that operated from ca. 1870–1929. It is the only building from the farmstead still in its original location. The name "White Barn," its local name, distinguishes it from the more



lowered central doorway and shiplap exterior siding are modern.

common red-painted barns in the area.

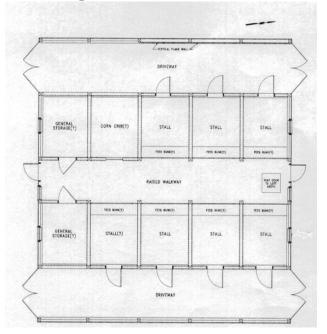
Barns are an important component of rural life. Different barn forms reflect specialized functions or relate to changes in construction technology over time. Historic barns acquaint us with elements of farm life that may be disappearing from the countryside. Acquiring an appreciation of historic barns and farmsteads helps us better understand Illinois' rich agricultural heritage.

The transverse-frame barn form was fairly popular in western Union County during the late 19th and early 20th centuries. A drive-by survey of barns (done during 2000 for the six townships surrounding the White Barn) revealed 14 transverse-frame barns and 10 other barns that apparently share the same transverse form. The White Barn is one of these few remaining transverse barns.

The term "transverse" refers to the orientation of the barn's interior divisions, which are aligned parallel to the ridgeline of the roof. Key elements of the typical transverse-crib barn include a front-facing gable or gambrel roof, a three-aisle interior layout of the lower story, an upper-story hayloft, and a rectangular footprint with depth longer than width. These are multipurpose barns that functioned as granaries, stalls, and haymows. The typical three-aisle form has a broad central walk or driveway flanked by a row of grain cribs or animal stalls to either side (each row being considered an "aisle"). The stalls accommodate horses, mules, or cattle. The central runway typically has double doors at each end for wagon access.

The White Barn is a variant of the transverseframe or transverse-crib barn form. The central aisle was originally a raised walkway rather than a driveway; consequently, the exits on the gambrel ends are walk-through doors of 3-foot width rather than double doors. The White Barn has interior driveways incorporated as two extra aisles, one exterior to each row of cribs/stalls. These "wings" are original construction, not additions. Thus this variant is actually a fiveaisle barn. The two interior driveways each have a double-door access at each gambrel end, which together with the central walk-though door,

First floor plan of the White Barn as



classes this as a three-portal barn.

The hayloft is quite commodious in the White Barn, due to the dual-pitched gambrel roof. The large loft may have contributed to the popularity of the transverse barn. A large mow door is present on the north end. A roof extension known as a hay bonnet juts out over the mow doorway. The hayfork track within this extension allows loads of loose hay to be lifted out of the wagon outside the plane of the barn wall, hoisted to the loft level, and drawn into the loft along the track. Large hay bonnets are more common on Southern American barns than Northern barns, where wagons are more often driven into the barn and hay lifted up to the side The transverse-crib barn form may have originated in northeastern Tennessee during the 1790s to address the needs of the diversified, semi-subsistence farmer. The presence of this barn type in the southern Midwest represents an extension of the Upland South building tradition.

With its five "aisles," the White Barn has a nearly square footprint of about 50' on a side. The first floor of the barn originally served as a loafing and feeding area for livestock. Livestock and wagons were moved in and out of the building through the double doors located at the north and south ends of the wings. The two "aisles" flanking the wings were originally each divided into five cubicles (each 9'2" x 10'6"). The partitions were removed in the 1970s. Nail and post patterns indicate the western aisle had three stalls at its north end and two cribs on the south, one a corncrib and one probably a general storage unit. The eastern aisle had four stalls with a single corncrib or storage unit at the south end. The corncribs would have been filled through doors facing the driveway aisle and emptied through a door accessing the stalls. 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 stalls had a gate opening into the adjacent driveway.

lofts from the open interior area. In a Southern barn and at the White Barn, the upper story has a solid floor with trap doors through which hay is



View of the east and north sides of the White Barn (2000). The shiplap siding and east-side doors were added in the 1930s. Note the large hay bonnet on the north.

In contrast to the dirt floor found in the rest of the barn, the central aisle had a finished floor that was raised a few feet above the ground surface. This corridor, which measured 7' wide between the posts, could be entered through a narrow door at both ends. The central aisle principally functioned as a walkway from which feed and fodder could be easily distributed to the adjacent stalls.

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 rough-surfaced, circular-sawn oak that was likely procured from a local sawmill. The poured dropped to feeders and stalls below. Ladders at each end wall provide access to the upper portion of the loft.

concrete used for the barn's perimeter foundations and interior footings was somewhat innovative, becoming common in this area around 1910. 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, fulldimensional 6 x 8" posts and girts connected with mortise and tenon joints. Yet, the framing materials are all sawn stock and have joints seated not with wood dowels but with wire-drawn nails, which were relatively new to the market. The barn's corner bracing, which uses both 4 x 4" and $1\frac{1}{2} \times 7\frac{3}{4}$ " stock, is also nailed in place, rather than mortised and tenoned. The side wings are framed by 6" posts that rest on a 4 x 8" sill and support a 6 x 6" plate that carries the 2 x $3\frac{1}{2}$ " rafters. The steeply pitched gambrel roof is framed with $2\frac{1}{2} \times 5$ " rafters set 2' on center: these are self-supporting and do not require purlins. The dual pitch that defines the core roof is created by using two sets of rafters. The lower rafters have a steeper slope and begin from a 6 x 8" plate. They are butted to the upper rafters and joined to them by means of a brace. The upper rafters meet at a narrow ridge board. The roof is covered with 1 x 4" 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 exterior of the barn originally was sheathed with vertical plank siding of variable width (generally $1 \ge 8$ "). Over this is horizontal shiplap siding that was applied by the Civilian Conservation Corps 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 20th 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 machinecut nails until the 1890s. Even then, machine-cut nails continued to be used by more conservativeminded builders for several decades longer. 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 19th century, was largely a 20th century phenomenon in association with the dramatic growth of the Portland cement industry after about 1898.

The White Barn is located on the SW1/4, SW1/4 of Section 8 in Township 12 South, Range 2 West of the 3rd PM. This 40-acre tract was purchased from the United States government on February 18, 1839 by Peter Cable. Cable signed a quit-claim deed to the tract in 1845, and David Lyerle

became the next owner. Considering that Lyerle paid only \$100 for 80 acres, which equals the government sale price of \$1.25 per acre, it is doubtful the property had been improved during Cable's ownership. The next recorded land transaction is by Andrew J. Lyerle, who sold a one-half interest in the parcel to John Lyerle for \$325 in January, 1870. The relationship of Andrew and John Lyerle to David Lyerle is not known, although it is possible that the former two were sons of David Lyerle.

John Lyerle, an Illinois-born farmer, purchased the 40 acre property on which the barn sits in January, 1870. The agricultural schedule from the 1870 census valued his entire 122 acres of land as worth \$2,800. Only 32 acres were reported as being "improved," meaning used as cropland or orchards or having farmstead buildings. The remaining 90 acres were covered with timber. However ten years later, by the time of the 1880 agricultural census, Lyerle had 36 acres of tilled ground, 7 acres of apple orchards (with 280 apple trees), 4 acres of peach orchards (with 280 peach trees), 2 acres of permanent pasture or meadow, and 111 acres of timber. His row crop production was declared as 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). His livestock was valued at \$500 and consisted of 1 horse, 3 mules, 2 milk cows, 1 head of cattle, 16 swine, and 35 chickens. He had, that year, delivered eight calves, sold three head of cattle, and slaughtered one other head for meat. For the preceding year, his cows produced 150 pounds of butter, and the hens laid 300 dozen eggs. The entire farm had an estimated value of \$1,600. This figure covered land, fences, and buildings and was significantly lower than the 1870 estimate of \$2,800. However, during the same period his farm machinery investment had increased from \$30 to \$200, possibly reflecting equipment necessary for the diversification of farm activities.

During the middle-to-late 1880s, John Lyerle significantly expanded his land holdings, purchasing land along the course of the hollow, particularly including river bottom land. In 1911, Lyerle sold his entire 320 acres to his son, William D. Lyerle, for \$3,500. William D. Lyerle was an attorney with a practice in the county seat of Jonesboro, about five miles away. During his relatively short period of ownership, it is possible that William Lyerle was responsible for the construction of the White Barn, although he most likely ran the farm through a tenant farmer. Less than five years after acquiring the farm, Lyerle was forced to sell it and an additional 360 acres in order to settle his debts.

On January 29, 1916, Dan R. Davie and Winstead Davie bought the William Lyerle lands for \$7,200. The Davies retained ownership 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. The transaction between the Davies and the State of Illinois was but one of a series of land acquisitions by the State in 1929 that involved a total of 3,000 acres. These lands initially were organized as the Kohn-Jackson Forest, but soon after were renamed Union State Forest and are now known as Trail of Tears State Forest.

After the state forest was established, the Lyerle House was moved slightly upslope, renovated, and used as the forest superintendent's residence into the middle 1980s. It was sold soon thereafter and was moved to a new location on private ground a couple miles east. The White Barn was never moved but was used by state forest and nursery staff to shelter draft animals and for general storage. In 1992, the southern third of the lower floor was converted into a combination visitor's center and hunter's check station.

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

The text of this brochure is an abbreviated version of the White Barn's assessment for the National Register of Historic Places, a report produced by Christopher Stratton, Fever River Research,

Springfield, Illinois, for the Illinois Department of Natural Resources. To learn more about the barns of Illinois see *Barns of the Midwest*, edited by Allen G. Noble and Hubert G. H. Wilhelm, and *The Old Barn Book: A Field Guide to North American Barns & Other Farm Structures*, by Allen G. Noble and Richard K. Clark