

## **End of horse era spurs revolution in barn design**

Though it may seem hard to believe, horses remained an integral part of Corn Belt farms well into the 1930s. And although the tractor began making significant and rapid inroads in the latter half of the decade, “power farming” would not become ubiquitous until the post World War II years.

That meant, generally speaking, that the last local barns built with work horses in mind date to the late 1930s or early 1940s. By then the emergence of the tractor and other sweeping changes in corn farming, coupled with the introduction of new building materials, gave rise to vastly different types of barns. The yawning gap between pre- and post-tractor barns is exemplified by the fact that some of the latter aren’t even called barns—instead these boxy, unadorned and utilitarian buildings carry the distinctly industrial identity of “machine shed.”

Corn was mostly picked (or rather, “husked”) by hand and pitched into wagons pulled by horses through the Great Depression. Mechanical corn pickers were not common until the 1940s, with combines (machines that both picked and shelled corn) coming a little later.

As horses and other draft animals were replaced by mechanical power, farmers turned away from general-purpose farming to specialization. With around one quarter of their acreage previously set aside for oats (raised for horse feed), as well as additional land no longer needed for pasture and hay, some farmers embraced intensive row crop production with corn and soybeans. Other farmers began small (by today’s standards) commercial livestock operations involving dairy or beef cattle, or hogs.

Often all-purpose horse barns were modified into dairy or beef barns, or to hold other livestock. But with their low ceilings, built-in stalls, feed bins, tack rooms and other “rustic” features, old barns were ill-suited, even with extensive remodeling, to efficiently serve as machine sheds.

The storage of loose hay in barns required cavernous second-story hay mows (or, more colloquially, “lofts”.) But the shift to baled hay often meant farmers abandoned the mow (frequently unable to support the additional weight of baled hay) for field or ground storage. In addition, the popularity of the “loafing” system, whereby cattle were no longer housed and fed in stalls but given more freedom to roam, contributed to the increasing obsolescence of traditional barn design.

Instead, more and more livestock were housed in one-story, shed-like buildings that often doubled as machine storage. The Pantagraph often referred to these barn / machine shed hybrids

as “utility barns” or even “utility buildings.” Some were framed in all-steel while others with laminated, pressure-treated wood poles.

“Government and university agricultural experts alike confidently predicted [in the postwar years] that the general-purpose wood-frame barn, nostalgically, and at times sarcastically, referred to as ‘the big red barn,’ would be replaced by five million gleaming buildings made of steel, aluminum, and treated wood,” noted a 1995 essay on the history of Midwestern barns.

Fortunately, Corn Belt farmers continued to build wood-frame barns (albeit now often with first-story concrete block walls), though not nearly in the numbers of the past.

Throughout the 1940s, downstate farmers also modernized old barns or built new ones in order to comply with the state’s grade A milk law. In the fall of 1941, for example, E.S. Sloane constructed a model dairy barn on his farm southwest of Danvers. The barn, large enough to house 24 Jersey cows, included a concrete floor and finished walls. The dairy herd was kept in an insulated partition apart from the machinery and feed storage areas. The barn’s many “refinements,” noted *The Pantagraph*, included electric lights, an electric-powered milking apparatus and a radio to help farm manager D.L. McClure and other hired help pass the day.

Despite the home front shortage of building materials during World War II, farmers, given the importance of food production in the Allied war effort, continued to construct new barns and other outbuildings. That said, they still had to jump through plenty of bureaucratic hoops. “Farmers,” announced a May 1942 advertisement for Parker Lumber of Bloomington. “If you need a new barn or [corn] crib see us. We can guide you in getting permission in compliance with the war-caused restrictions on building. Let’s talk it over.”

In the summer of 1945, at war’s end, Paul Graf of rural Bloomington built a handsome 28 by 30 feet barn with a traditional second-story mow to accommodate his dozen or so cows. The walls were of concrete block, with Graf telling *The Pantagraph* that “it is almost impossible to get a good quality wood for buildings now.”

Quonset-style barns proved especially popular after the war, since tens of thousands of these “huts” had been built for the military at home and overseas. Detroit-based Great Lakes Steel Corp., a leading Quonset manufacturer, had a number of authorized dealers in the area, including the R.J. Kuhn Co. of Danvers and Acme Roofing of Bloomington.

The “Quonset 40” type barn was 40 feet wide with a pair of sliding doors and entryway large enough to accommodate most farm equipment then in use. It came in sections of 20 feet enabling farmers to build to their liking, whether 40 by 60 feet, 40 by 80, or larger. “The ‘Quonset 40’ is framed with steel and covered with steel to give you the sturdiest, most durable building ever

produced for the farm,” declared an Acme Roofing advertisement for Quonsets in December 1945. “It is fire-safe, sag-proof, rot-proof, warp-proof—strong with the uniform strength of steel.”

One advantage of curved or Quonset-shaped barns was the lack of crossbeams and other support—“not a brace for a bird to roost on overhead,” it was said. Curved barns made of wood with asphalt roofing were also popular. Lloyd Shifflet built one such barn in the spring of 1947 on the old Champion farm north of Towanda. One end housed stanchions and box stalls for eight cows, while the other served as a machine shed large enough to keep a four-row corn planter “under cover.”

The modern postwar barn was perfectly realized in the steel-framed and steel-sided “utility barn” built in late 1949 on the Crumbaugh estate outside of LeRoy (see accompanying photograph). Farm operator M.J. Banner planned to use the 36 by 84 feet structure, which replaced a barn burned earlier in the year, for machinery (including a “self-propelled combine”) and hay storage, though he’d still have room enough for three “all-purpose” livestock box stalls.

If you’re interested in this topic, Bill Kemp is presenting an illustrated talk on barns of the 1940s this Thursday, Nov. 10, at the annual meeting of Barn Keepers. The program is free and open to the public and begins at 7 p.m. at the FS Evergreen Building, 402 S. Hershey Rd.