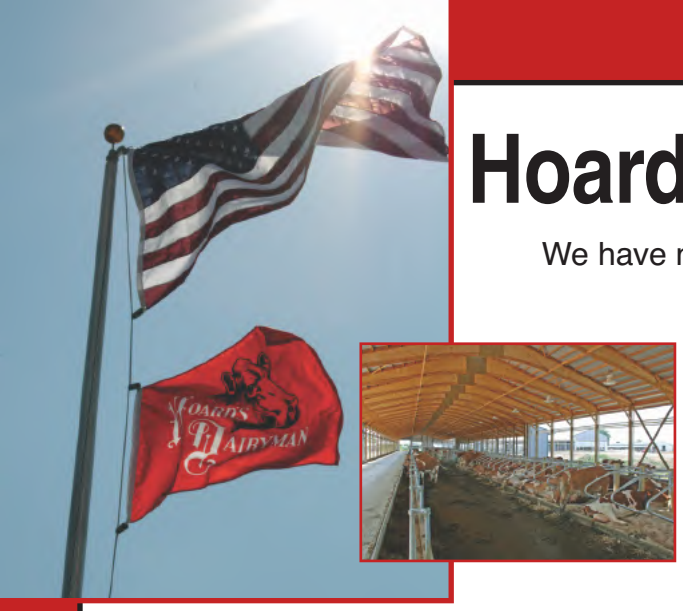

Hoard Farm facilities near completion

We have moved into a two-row, sand-bedded free stall barn with a double-10 herringbone. Groundbreaking to first milking took 200 days.

by Hoard's Dairyman staff

A NEW era dawned at the Hoard's Dairyman Farm when we moved the milking herd to new facilities on June 21. The move marked a milestone in the farm's 108-year history. While there have been many advancements in herd care and some fine-tuning of facilities, the last major housing project was construction of a free stall heifer and dry cow barn in 1976.

The new barn and milking center will enable us to expand the herd to a size more relevant to where more of our readers across the country will be. This will strengthen the invaluable role that the farm plays in helping the magazine serve its readers. The investment also represents renewed commitment by the company's ownership, the Knox family, to the farm, the magazine, and the dairy industry.

In 1899, W. D. Hoard, founder and first editor of the magazine, purchased 193 acres on the north side of Fort Atkinson, including a 100-acre parcel with a brick house, some modest outbuildings, and a few grade Guernseys. One of his early incentives was to determine whether alfalfa, known only on the West Coast at the time, could grow and winter over in this climate. Hoard also sought to evaluate, through trial and error, the practicality of dairying methods being investigated at universities and pass on his findings to readers. The U.S. Department of Interior has placed that original tract on the Registry of Historic Places. The land base has grown to 550 acres; 450 tillable.

Guernseys from the start . . .

Hoard actually had a few cows behind his residence in Fort Atkinson, including purebred Guernseys that he had registered. He added his Guernseys to those on the purchased farm and reported having 24 cows in 1906. The farm now is the oldest continuously registered Guernsey herd in the U.S. We will continue with Guernseys which lend themselves to our approach to dairying and our cheese-yield milk market. Approximately 185 head of cows and heifers have been purchased over the past four years. We now have 270 cows on the DHI test sheet.

The barn that Hoard built on the farm had a 36-foot-wide stable with two rows of tie stalls. Initially, there were 24 of what came to be Hoard comfort stalls. Boards over the mangers encouraged cows to use the rear of the stall while standing. A later addition brought the total to 55, plus box stalls and calf pens. A 1971 project enlarged the barn to 82 tie stalls, with some additional box stalls. We removed the calf pens in 1974 when we began using calf hutches.

A pipeline replaced a milk transfer system in the late 1970s. We installed wind-tunnel ventilation in the early 1990s and had replaced rubber mats in the stalls with mattresses. As we saw the need to milk more than a barn full, we housed switch cows in two bedded-pack barns. Fresh cows spend about a week to 10 days in the existing barn and lot before being moved to the new barn.

Like many of you, we simply outgrew the facilities we had. As we grew, the operation became more labor intensive. At the time we moved into the new facilities, farm employees were milking as many as 160 cows through the old stall barn. Thanks to hard work and good care, milk production and herd health continued to improve, but the situation stressed both people and cows.

What we wanted . . .

Here are the goals we set in our planning:

- Adequate return on investment.
- Safe, healthful, and pleasant working conditions for employees.
- As odor-free as possible.
- Practical use of existing facilities.
- Cutting edge cow comfort and cleanliness.
- Maximum biosecurity and disease-spread control.
- A dedicated breeding, treatment, herd check, and hoof care area.
- Avoid the need for any protocol shortcuts. (We didn't want our facilities to prevent us from doing anything we thought beneficial to the cows.)
- Maximum flexibility in group sizes and grouping alternatives.
- Minimize movement and regrouping, especially during the weeks before and after calving.
- Most effective use of our employees.
- Labor efficiency without sacrificing cow health, comfort, or productivity.
- One person cow handling (to and from milking center and all special needs areas).
- Milk within three to four hours with one person.
- Cows away from bunks and free stalls no more than four hours total per day.
- Attractive, but low maintenance facilities and landscaping.
- Opportunity for expansion of milking parlor and for additional housing areas.
- Space for possible on-farm processing of milk in the future.
- Parking facilities for employees and visitors.
- Energy efficiency and responsible nutrient management.
- Ways to display cattle, including care (tie-up) of sale or show animals; conveniently clip, wash, and flush cows; and present cattle for visitors, classification, and judging team workouts.
- Promote a positive image of the magazine, the farm, and the company in the eyes of our readers, advertisers, and the community.
- Conveniently accommodate visitors, including busloads.

Most of these goals we feel we have accomplished. Some are yet to be addressed. And some we probably won't meet, at least, not to the extent we would like.

Ours was the third dairy operation to be approved under Wisconsin's new siting law. Even though our permit application was the first handled by Jefferson County officials under the new law, the process took only about eight weeks. However, our consulting engineer had been working on our design and application for several months.

We received only a few concerns about our plans at public hearings. This, perhaps, was somewhat surprising because we chose to locate our new facilities directly behind (east of) our current buildings and abutting the city limits of Fort Atkinson. This decision undoubtedly has raised some eyebrows. However, that site was deemed the best of four across our acreage that were considered. Our city neighbor is an industrial park. We plan to be a good neighbor to Fort Atkinson, just as we have tried to be for more than 100 years. Also, we believe our greatest odor potential will be when we inject our liquid manure, and the bulk of our cropland is well away from the city and any residential areas.

What we have . . .

Focal point of the new system is the milking center with a double-10 herringbone, expandable to double-12. We have electronic ID using neck-chain transponders. We chose this system and automatic sort gates to eliminate the need for lockups in the free stall barn. Electronic ID in the parlor permits automatic milk, flow rate, and machine-on time monitoring with summary reports. In addition, the transponders signal real-time cow activity to antennas located in the free stall barn and holding pen areas. We use activity reports to detect heats and inseminate accordingly.

The 43-inch on center, rapid-exit herringbone stalls have arm-type detachers. The 3-inch, basement-mounted milk pipeline flows to a single receiver in the lower level which also contains the wash tank, compressor, poly tank for heat-exchanger water, and some storage.

The 88-foot-wide milking center has a 40-foot-wide parlor room and holding pen area with a 24-foot-wide by 70-foot-long wing on each side. One wing contains a 12- by 18-foot milkroom with a 5,000-gallon bulkheaded tank. There also are an 18-foot-square wet room with water-related equipment and an 8- by 18-foot dry room where electrical service enters and is distributed. That wing has an 18- by 30-foot employee area with appliances, lockers, shower, and toilet room.

We designed the other wing to enable us to better accommodate visitors. Guests enter through a 12- by 24-foot reception area. There are restroom facilities for men and women, plus a 30- by 30-foot room for guest seating or occasional group functions. That wing also has a 10- by 18-foot farm manager's office with conference table.

We chose to have two rows of free stalls for ventilation, biosecurity, and traffic flow reasons. With our 16-foot-high sidewalls, 60-foot width, and relatively heat tolerant Guernseys, we do not plan to install fans or misters. They can be added, if needed. We do have fans in the holding pen.

The free stall barn has an 18-foot-wide drive alley for feeding, a 13-1/2-foot feed alley, face-in free stalls that are 16 feet outside curb to outside curb, and an 11-foot back alley. Stalls for heifers are 43 inches wide; all others are 48. We bed with sand, scrape into drops, and move manure to a sand trap using a flush flume system. From the sand trap, manure goes to a lined, 5- million-gallon storage.

In future issues, we will address our approach to the goals we set, design options we chose, and experiences we have had.