



# pork industry handbook

COOPERATIVE EXTENSION SERVICE • MICHIGAN STATE UNIVERSITY

## Remodeling Ideas For Farrowing Facilities

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Existing farmstead buildings, such as dairy barns, can sometimes be remodeled into successful farrowing facilities. Other times, however, the only benefit of remodeling is saving the cost of the building "shell," a relatively small percentage of the total construction cost. Therefore, all available options should be analyzed carefully before proceeding with a remodeling project. This fact sheet first discusses the decision factors in remodeling and then how one should approach such a task.

### Decision Factors

#### Location

If an existing facility is not in or near an area suitable for a new facility, then the old unit should not be remodeled. Criteria for proper site selection include: correct distance and direction from farm home, location near existing hog facilities; space for future expansion, ease of materials (animals, feed, and waste) handling, proper drainage, reasonable access to utilities, and some degree of security. Rarely can all of these guidelines be strictly found when considering locations. But if the site is, for instance, adjacent to and downwind from the house or on the opposite side of the farmstead from the other hog buildings, the decision to remodel *definitely* should be reconsidered.

#### Structural Soundness

Obviously, the structural condition of the existing facility is important. The building should be sound from the foundation to the roof. If work is needed to solve major problems such as a cracked foundation, a sagging roof, a leaning wall, or a series of rotten ceiling joists, then the facility should not be remodeled. Only a minimum amount of exterior work, such as shingling and painting, can be tolerated in a proposed remodeled building.

#### Physical Size

First determine the space required for the proposed farrowing operation. Then, if the building is of sufficient size, consider it to be a candidate for remodeling. Do not reduce original size requirements to fit an existing structure; in-

stead, build a new unit. If a building is too large, a partition wall can be added to accommodate the proposed farrowing unit.

#### Pros and Cons

Before starting a remodeling project, list the advantages and disadvantages of the proposed remodeled structure. Consider the location, the structural soundness, the size and other criteria in the list. Economic considerations are important, but remember that most people *underestimate* the cost of materials and labor required for remodeling. If remodeling expenditures exceed 50% of the cost of a new unit, do not remodel. The time spent listing the pros and cons can often save a great deal of money, time and disappointment.

### Design Factors

#### Layout

After deciding to remodel, the first item to consider is the layout. The arrangement of the farrowing crates or pens depends on all of the following: inside dimensions of the facility; condition and contour of the floor; location of support posts, gutters, mangers, partitions; and other obstructions. Most dairy barns can accommodate up to 3 rows of farrowing crates or 2 rows of farrowing pens (Figure 1). Other facilities (Figure 2) can tolerate only 2 rows of crates and a single row of pens. Narrower buildings can use the arrangement given in Figure 3 which allows for 2 rows of crates with narrow side alleys used for feeding sows and handling piglets. As a general rule, it is preferable to have crates and pens run the length of the building rather than across the width. However, partitions may be added to a large facility, as shown in Figure 4, to allow for separate farrowing rooms with a common hallway. If farrowing crates are desired, the "raised" variety (Figure 5) adapts to most types of existing floors; whereas, considerable concrete work is often required if crates are placed on the existing floor. In addition, raised crates can be purchased pre-assembled which speeds up the remodeling process. A disadvantage includes difficulty getting sows in and out

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