

Dairy Barn Plans



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Dairy Barn Plans

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During the past five or six years a number of dairymen in Texas have tried out the small unit dairy barn and they have found it more profitable than the large barn which holds all the cows at one time.

By small unit barn is meant a milking barn that holds a small portion of the herd. The cows are milked in relays. The dairyman may have a hundred milking cows and a milking barn that only holds four cows.

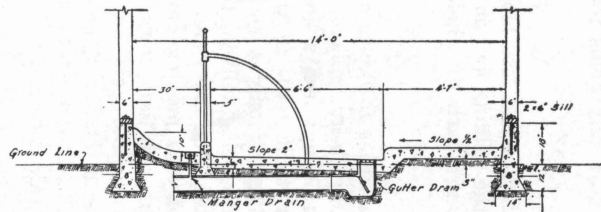
The small barn costs less to build, less to maintain and less labor to keep clean. The same number of milkers can do the milking and do it in the same length of time that they can in the large barn that holds the entire herd.

The size of the small unit barn depends upon whether the cows are fed all or a part of their grain mixture while they are being milked. If the cows are good ones and are fed all of their grain mixture, a good milker can milk three cows while they are eating their feed. In this case the barn should hold three cows for each milker. If only a small part of the grain mixture is fed while the cows are being milked, the barn may only hold one or two cows to each milker. One dairyman in the state milks about 100 cows and uses a four-cow-size milking barn. One man operates the milking machine that milks the four cows at one time. Another man washes and cleans the cows and puts out a small amount of feed. A boy keeps four fresh cows in the chute, ready for cleaning and takes the cows that have been milked back to the shelter shed where they are given the rest of the grain mixture.

Another dairyman has his cows milked by hand and feeds them all of their grain mixture while they are being milked. This dairyman uses three milkers and his milking barn holds nine cows. This arrangement will take care of 45 to 60 cows.

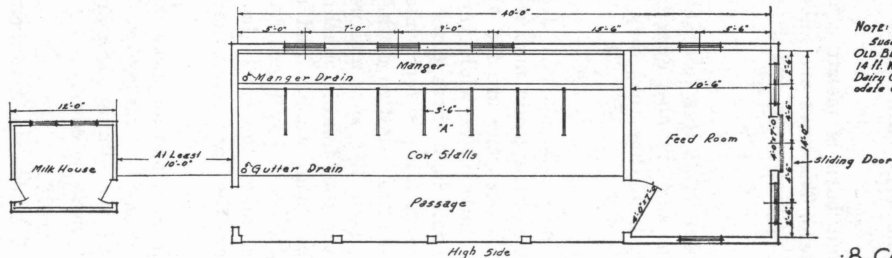
Figure No. 7 shows the arrangement of the milking barn, shelter shed, milk house and lots that will handle from 30 to 40 cows, with a six-cow size milking barn. Figure No. 3 shows plan for the six-cow size milking barn. Fig. No. 5 shows plan for shelter shed where hay and silage may be fed.

Fig. 1. A floor plan and a cross section of the shed type dairy barn are shown. This barn is the eight-cow size.



SECTION

STALL DIMENSIONS	
BREEDS	WIDTH IN"
HOLSTEIN	4'-0"
GUERNSEY	3'-6"
JERSEY	3'-6"



NOTE

All Windows Are 3'x3' Openings
All Window Sills 4' From Ground

FLOOR PLAN

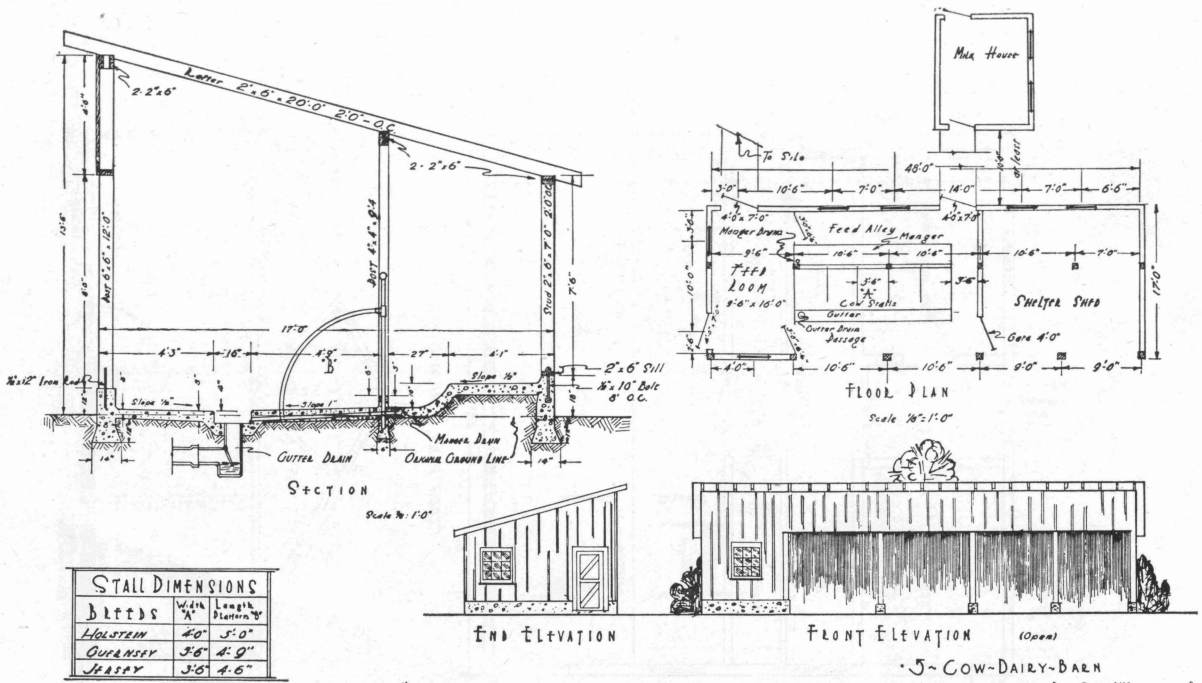
NOTE:

SKETCHED PLAN FOR REMODELING
OLD BUILDING.
14 FT. Wide (inside) to House One Row of
Dairy Cows. Building 14'x40' to Accom-
modate 8 Cows and Feed Room

8-COW DAIRY-BARN*
FOR
OLD BUILDING 14'x40'

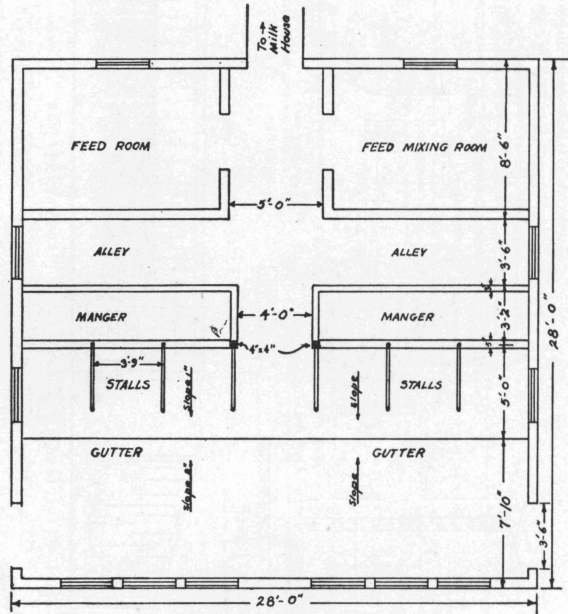
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SHEET No. 1 of 1 SHEET SERIAL No. 140

Fig. 2. Shed space for five cows has been provided in this shed barn of which the floor plan and cross section are shown. This barn is of the progressive type and can accommodate 10 cows by adding extra stalls.

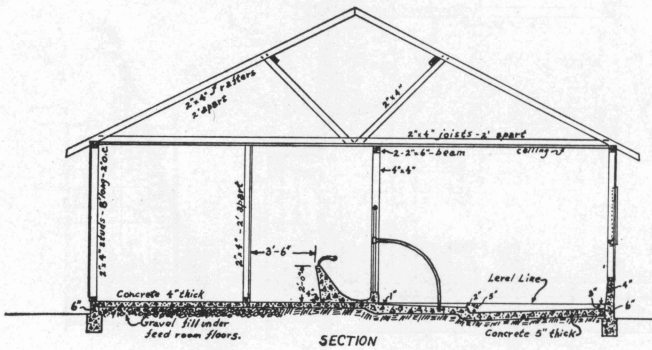


NOTE: Use 1" BOUTIQUE WIRE FENCING ON THE OPEN SIDE TO HOLD THE HOOP & CHAIN

5-COW DAIRY BARN
 For Architecture to this Barn see Plans Sheets Nos. 153, 154.
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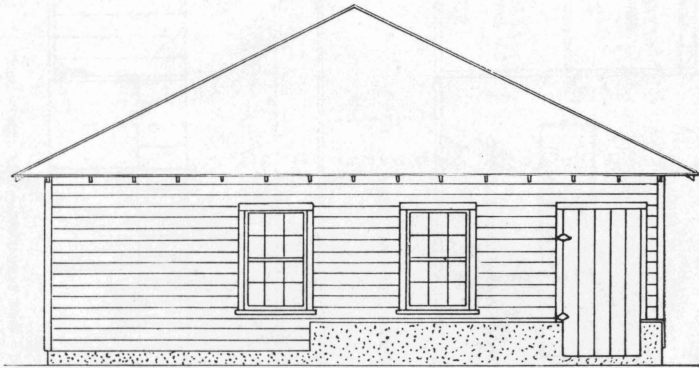


FLOOR PLAN OF MILKING BARN

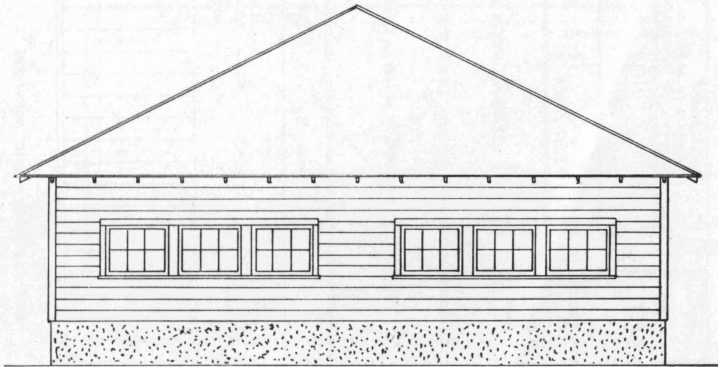


SECTION

Fig. 3. The floor plan and a cross section of a six cow milking barn are shown above.



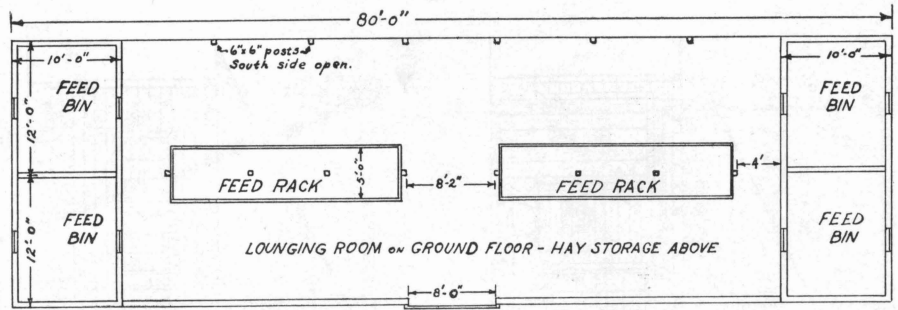
SIDE ELEVATION



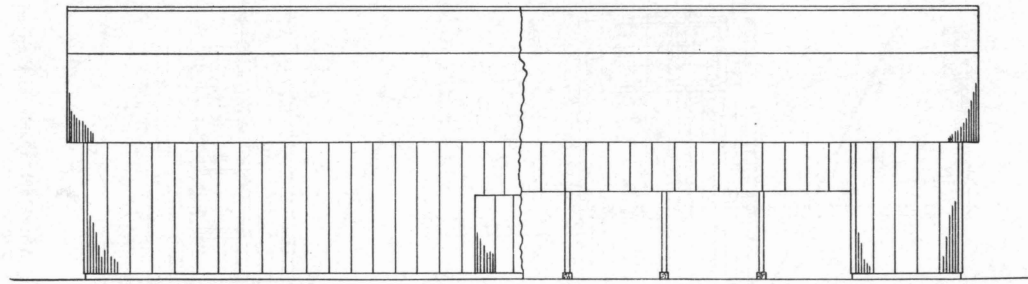
END ELEVATION AT REAR OF COWS

Fig. 4. Above are a side and an end view of the six-cow milking barn shown on the opposite page.

Fig. 5. The floor plan and side view of a lounging barn are shown above.



FLOOR PLAN OF HAY AND GRAIN STORAGE BARN AND LOUNGING BARN



SIDE ELEVATION OF HALF NORTH SIDE

SIDE ELEVATION OF HALF SOUTH SIDE

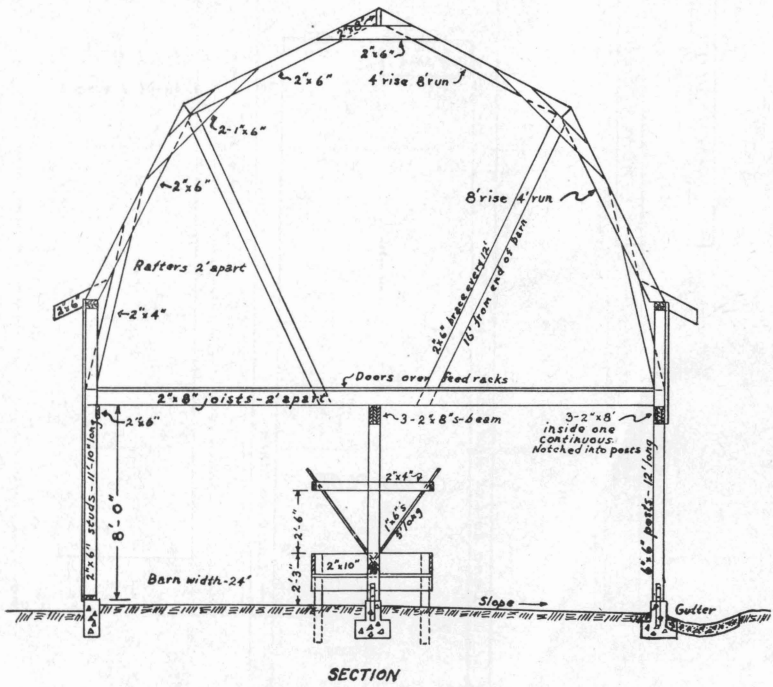


Fig. 6. This is the cross section of the barn shown on the opposite page.

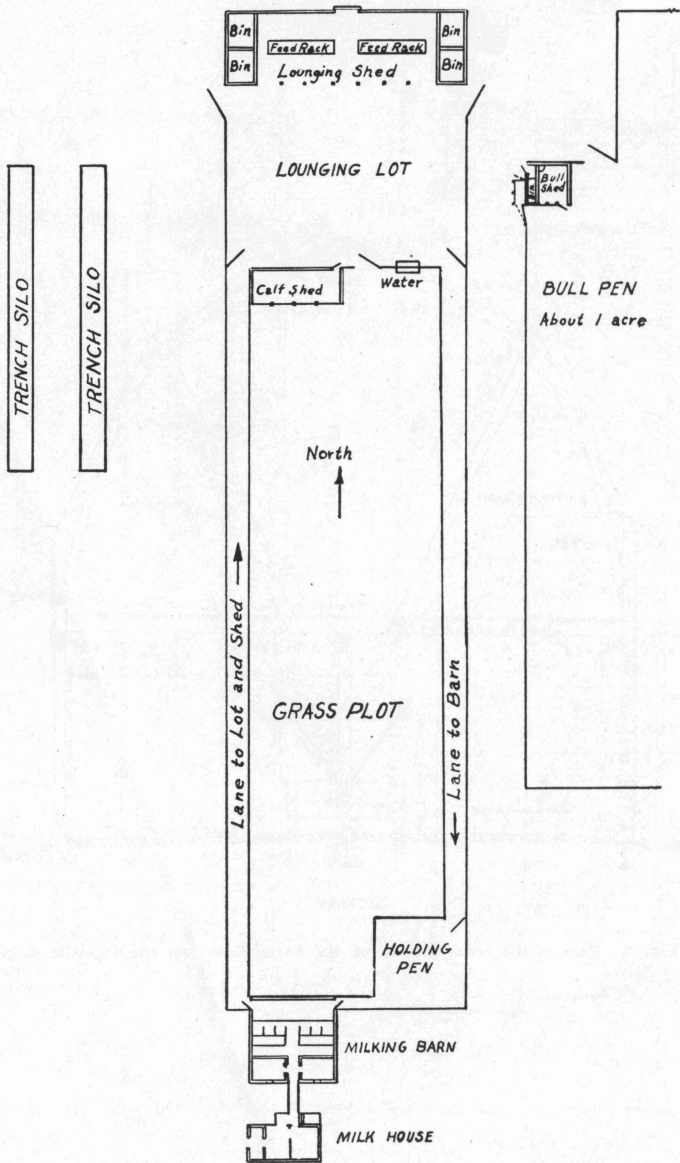
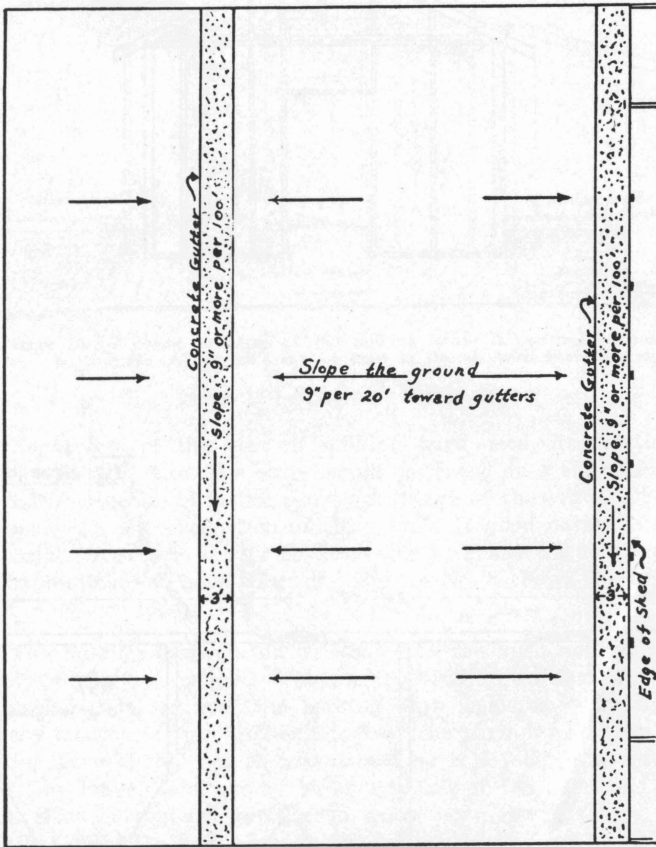
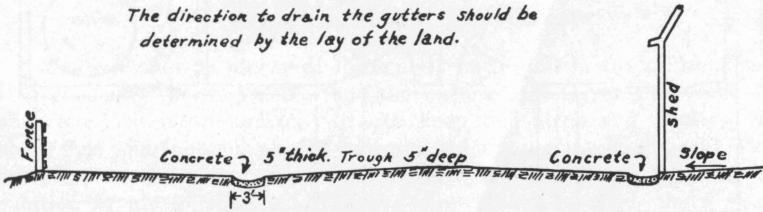


Fig. 7. The ground plan shown above is of a dairy layout which can be adapted to any size herd.



Plan of Lot Drainage.

The direction to drain the gutters should be determined by the lay of the land.



Cross Section of Lot.

Fig. 8. The above plan for draining barnyards in level sections is recommended.

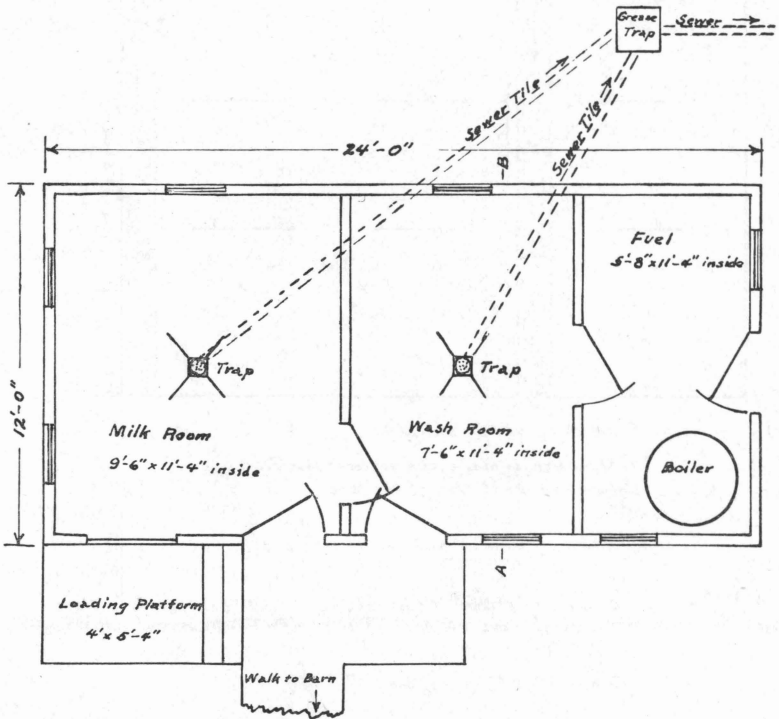
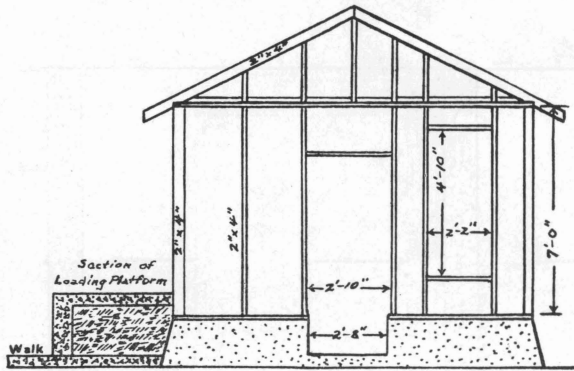


Fig. 9. A detail of the floor plan and the side view of the milk room shown in figure 7 is reproduced here.

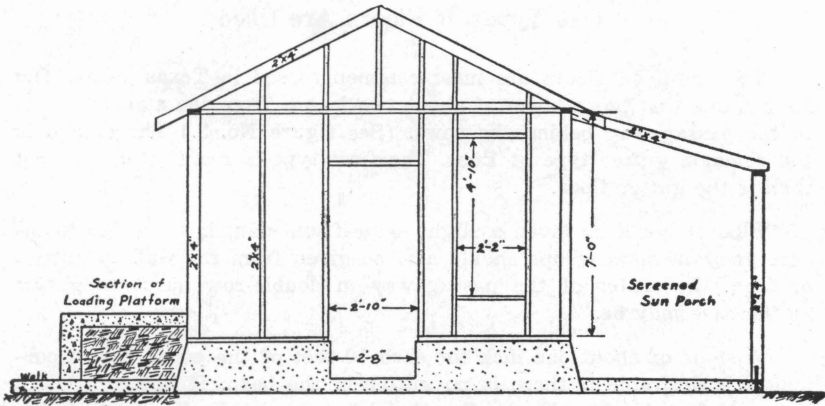


Figure 10. The end elevation of the milking house is pictured here showing the sun room on the side. All utensils can be kept in the screened room for sunning.

Select Location With Care

Regardless of the kind of milking barn used, its location should be selected with care. The barn should be placed on a slight elevation of ground if possible, to insure proper drainage of the yards. Dry lots are necessary for the production of clean milk. If good natural drainage is impossible to secure, it will be necessary to grade the lots and provide drainage ditches to keep them dry. Figure No. 8 shows the best method of grading cow lots.

The milking barn should be located in the open and should not be closely surrounded by trees. Trees are desired on the farm for shade for livestock but if too near the milking barn, sunshine will be kept out, thereby making it more difficult to keep the barn dry and sanitary. The milking barn should not be surrounded by cow lots, as so often is the case. The lot, or lots, should be at one end of the barn and the other three sides surrounded by a good grass lawn. In this way, dust and dirt that enter the barn through the air can be kept at a minimum.

Provide Light and Ventilation

There should be plenty of light and ventilation in the milking barn. If a shed type barn is used, face the barn south. Cover the south side with one-inch mesh poultry wire to keep out birds and poultry. The north side and the ends should be solid walls to keep out the cold. However, the north wall should be provided with windows to help the circulation of air in summer. Where a closed barn is used, there should be a window, at least 36 inches wide, in both the south and north walls for every two cows. The east and west ends may be closed. For the best circulation of air, the base of the windows should not be more than three feet above the floor.

Two Types of Floors Are Used

Two types of floors are most commonly used in Texas barns. The first is one that has a slope of about two inches from the stanchion line to the passageway behind the cows. (See figure No. 3.) The second is the common gutter type of floor. The first type is more easily cleaned than is the gutter floor.

Floors should be given a slight slope from manger to gutter to insure good drainage. Slope should also be given from the wall to gutter, or from the center of the passageway in double-row barns to gutter as the case may be.

A slope of about one inch for each 10 feet of the whole barn floor-length is desirable if there is no gutter in the barn. If gutter is used, it is satisfactory to make the floor level from end to end and to provide drainage by sloping the floor of the gutter.

Concrete floors should not be made very smooth because too often cows slip and fall on smooth floors, especially if the floors are wet. A surface layer should be made of good rich concrete which will not soon wear into holes, and the surface should be floated rather than troweled down smooth.

Concrete Mangers Are Preferred

Mangers may be made of either concrete or wood but the former are preferable since dirty corners and crevices can be eliminated. Mangers may be made with divisions between cows but a single long manger is recommended because of ease in cleaning. If at least three and one-half feet of space is allowed each cow there is very little trouble in one cow getting another's feed. Manger floors ought to be built about six inches above the cow's front feet, and not 18 or 20 inches as is so often the case where wooden mangers are used. The back of the manger should be about three feet high to prevent the cows from spilling their feed.

Shed Barns Are Easily Constructed

The simplest and most easily constructed type of barn and one that will serve very satisfactorily on most dairy farms in South and East Texas, is the shed type. By making the shed 14 feet wide, there is ample room for a manger, platform for cows, gutter and passageway.

The Texas Extension Service has plans for several types and sizes of dairy barns. If plans for a milking barn are wanted these can be secured through county agricultural agents.

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