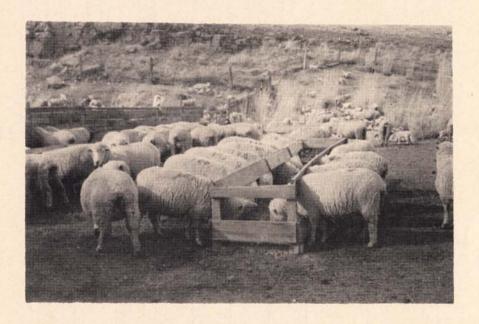


## UNIVERSITY OF IDAHO

College of Agriculture

# Farm Sheep Equipment Layouts



E. H. DAVIS AND WADE G. WELLS

630.72 Idle

> IDAHO Agricultural Extension Service

Bulletin 273 April 1957

LIBRARY UNIVERSITY OF IDAHO

# Farm Sheep Equipment Layouts

E. H. DAVIS AND WADE G. WELLS\*

#### Considerations in Locating Buildings and Equipment

THE corral arrangement, Figure 1, should be located on well-drained land. Expensive equipment is not necessary, but protection from drafts and provision for a dry bed and good ventilation in winter and cold, rainy weather are most important. Plenty of light is necessary for healthy sheep and is a convenience for the proper care and handling of the animals.

Some sheepmen prefer a wide alleyway, 10 to 12 feet, in the lambing shed so that ewes about to lamb can be held in this space at night. Also, if the building is long enough, a few ewes and lambs can be grouped in one end to get accustomed to one another before being turned out into the flock.

#### Construction Materials

Pole-type buildings are popular where low-cost, yet substantial and permanent buildings are desired. Pole-type buildings are easy to construct. Sheep sheds and shades in open fields supported by treated poles provide inexpensive shelter. Whatever building materials are used, however, good ventilation, dryness and freedom from drafts are necessary for healthy animals.

Table 1.—Recommended space for sheep

|        | Barn or<br>shed    | Feed lot       |              | Hay<br>rack   |                 | Feed<br>trough   |                 | Self<br>feeder  | Water              |
|--------|--------------------|----------------|--------------|---------------|-----------------|------------------|-----------------|-----------------|--------------------|
|        | Per animal sq. ft. | Dirt<br>sq ft. | Paved sq ft. | Length inches | Width<br>inches | Length<br>inches | Width<br>inches | Lenth<br>inches | Per day<br>gallons |
| Page 1 |                    | 25             | 20           | 18            | 14              | 16               | 14              |                 |                    |
| Dry    |                    | to             | to           | to            | to              | to               | to              |                 |                    |
| ewes   | 12-20              | 40             | 30           | 24            | 16              | 22               | 16              |                 | 11/2               |
| Ewes   |                    | 25             | 25           | 18            | 14              | 16               | 14              |                 |                    |
| with   |                    | to             | to           | to            | to              | to               | to              |                 |                    |
| lambs  | 15-22              | 50             | 40           | 24            | 16              | 22               | 16              |                 | 2                  |
|        |                    | 30             | 30           | 18            | 14              | 20               | 14              |                 |                    |
| Stud   |                    | to             | to           | to            | to              | to               | to              |                 |                    |
| rams   | 20-30              | 60             | 60           | 24            | 16              | 24               | 16              |                 | 12                 |
|        |                    | 20             | 10           | 12            | 12              | 12               | 14              | 3 lambs         |                    |
| Feeder |                    | to             | to           | to            | to              | to               | to              | for each        | 12"                |
| lambs  | 10-12              | 30             | 20           | 15            | 14              | 15               | 16 1            | eeder spa       | ce ½               |

#### Provide Ample Space for Sheep

If sheep are to be fed from two sides of the hay rack or feed trough, the width of the feeders shown in Table 1 should be increased by 6 to 8 inches. The width shown is for feeders where the animals are fed from one side.

The hay bunk illustrated in Figure 2 permits more sheep to

<sup>\*</sup>Extension Agricultural Engineer and Extension Animal Husbandman, University of Idaho Agricultural Extension Service, respectively.

feed in less space because they can stand at an angle to each other while eating.

#### Provide Access to Clean, Fresh Water

Sheep should have free access to all the clean, fresh water they will drink at all times. Under certain circumstances, sheep may get along with little or no water. Usually this is when dew is heavy and feed is succulent, or under winter conditions when clean snow is available. The conditions under which most farm flocks are managed require that a good source of water be provided if the sheep are to produce efficiently. Drinking water from pools in the corrals or eating ice and snow over which sheep have trampled may be a source of infection with internal parasites and disease. Where the sheep have free access to it, a barrel with a cover to keep out dirt and chaff and an opening so only one sheep can drink at a time is suitable for small flocks. The barrel can be filled by hand or attached to a water-supply pipe and the flow regulated with a float.

#### Keep Feed Clean

One of the main essentials in a grain feed trough is cleanliness to prevent feed waste. The trough described in Figure 3 has a ridge pole to keep sheep from getting their feet in the trough. All left-over feed and other material should be removed before each feeding.

The rollers in the creep divider shown in Figure 4 make it possible for larger lambs to go through a smaller space. The rollers tend to let them roll through while stationary slats drag on the wool and hold them back. The smaller space in the openings is particularly important after the ewes are shorn.

#### Labor and Time-Saving Ideas

Wool growers in Clark County save backaches by loading bags of wool into a transport truck with a hydraulic hoist mounted on front of the tractor. The tractor picks up the bag at the scales, transports it to the truck where the hydraulic lift places it in convenient position for the trucker to handle.

A sheep operator in Cassia County has built his loading chute in two sections for ease in loading. The first section is on a moderate incline extending from ground level to the height of first deck of truck. The second section is approximately 12 feet long and the floor is hinged at the end of the first section so it can be raised to load the top deck of the truck after the first deck is loaded.

Either hover-type or heat-lamp brooders may be used for lambs. If the hover-type pig brooder is used, it should be raised to a height of 24 to 30 inches to give lambs room enough to stand. This can be done by removing the bottom cross tie of the triangular pig brooder and adding side boards 6 to 12 inches wide to the bottom side. Thus, one hover can be used for both pigs and lambs.

If a heat-lamp brooder is used, some care should be taken in adjusting the height of the lamp. If it is too low, the lambs can get their wool scorched. The fleece acts as insulation and their wool may char before they move away from the heat. For lambs,

away from the lamp.

Weak or chilled lambs should be placed in a brooder until they are dry and warm. A lamb generally needs only 1 day under a brooder to get strong enough to run with the flock. Do not completely separate the lamb from the ewe or she may disown it. This is especially important if the ewe has twins, or the lamb is put in the brooder immediately after it is dropped. Have enough space for both lambs and ewe in the brooding pen, but hang the heat lamp behind the partition.

## Bill of Materials for a Heat-Lamp Brooder

1. One 250-watt R-type hard-glass heat lamp, or similar heat lamp.

2. One weatherproof socket with porcelain-lined receptacle and 1/2inch threaded nipple.

3. One male fixture loop with ½-inch threaded stem.

- 4. Six or 8-feet of light dog chain (to hang lamp to ceiling or rafters).
- 5. Ten feet of two-wire No. 14 size, stranded-rubber-covered, heavy-duty, type S flexible cord.
- 6. One locking-type two-wire cord cap with cord clamp for 1/2-inch diameter cable.
- 7. One locking-type double convenience outlet and 4-inch coverplate.

## Night Lights During Lambing Period

The following is a summary of results with night lights in South Dakota:

1. Seventy-five ewes in the flock bore 123 lambs with four sets of triplets.

2. No lambs were disowned and all lived to be weaned.

3. Four 100-watt lamps were used every night for 3 weeks. Two 100-watt lamps were used in a shed at night for 2 weeks after the lambing was over.

4. Estimated cost of electricity for lighting - 179.5 kilowatt hours at 3 cents per kilowatt-hour, \$5.38.

#### **Bulletins Available**

Additional publications on sheep equipment are available at county extension agent offices or at the Idaho Agricultural Extension Service, Boise or Moscow.

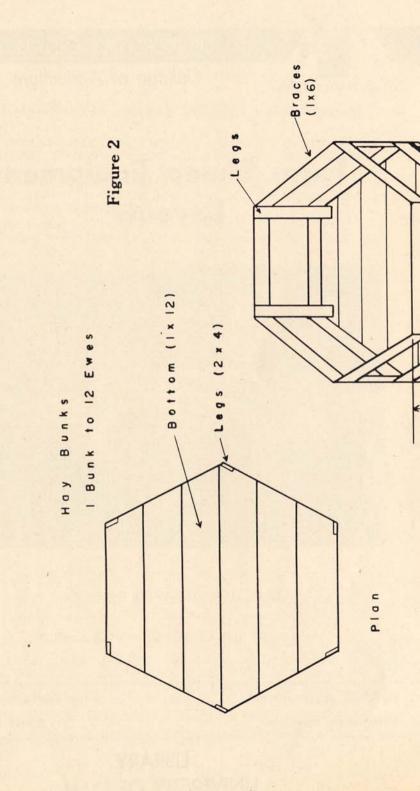
Pole Frame Construction for Idaho Farm Buildings-Ext. Bul. 194.

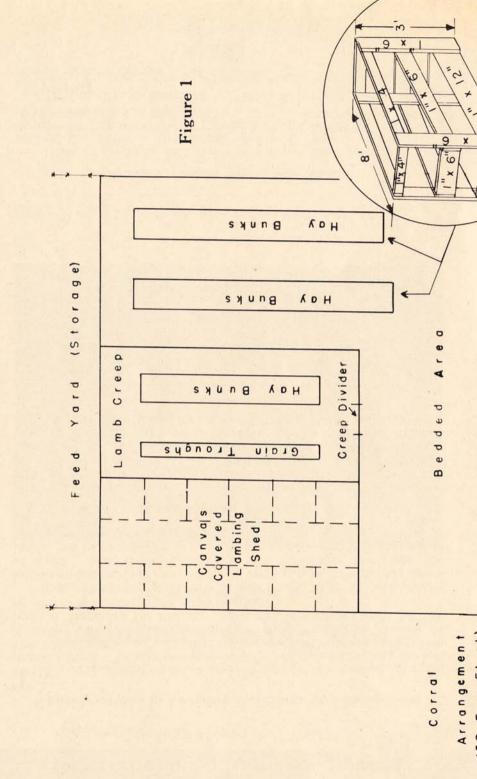
Idaho's Portable Sheep Loader—Exp. Sta. Bul. 203. Plans for Idaho Farm Builders—Ext. Bul. 236.

Electric Broding Saves Pigs, Saves Lambs, Saves Feed —USDA Farmers' Bul. 2039.

Types and Uses of Infrared Heat Lamps on the Farm -Idaho Farm Electrification Leaflet No. 35.

Cold-Soak Wood Preservation-Ext. Bul. 187.





Creep Divider

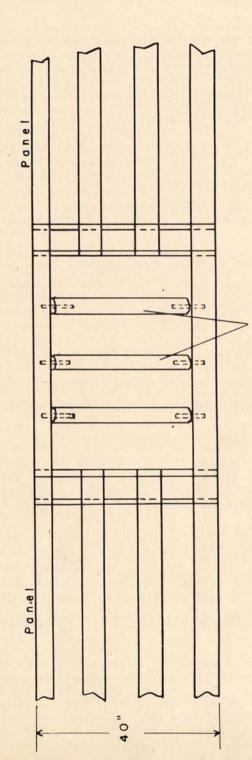
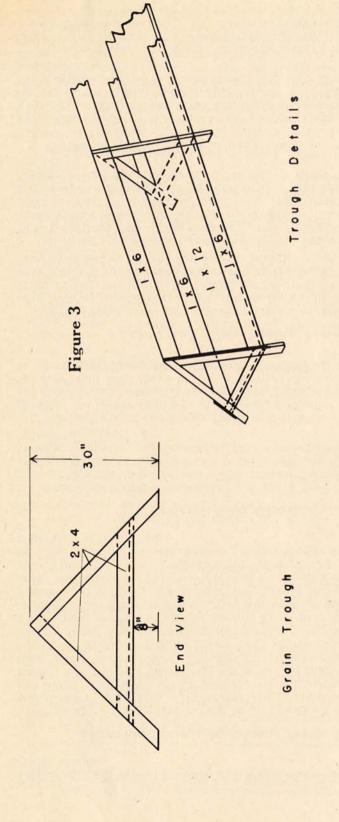


Figure 4

Variable Uprights (Rollers) Small Lambs 6" to 8" space.

Large Lombs 8" to 10" space.



Easily turned over and cleaned each time grain is fed, Trough is 3" deep.