



Natural Resources Conservation Service

# Livestock Shelter Structure

*Alabama Job Sheet No. AL576*



## DEFINITION

A permanent or portable structure having less than four walls improve utilization of pastureland and rangeland and to shelter livestock from negative environmental factors.

## GENERAL INFORMATION

A livestock shelter structure can be constructed permanently or as a portable unit. In order to minimize manure concentrations, portable structures are preferred. Permanent structures are generally constructed of wood and may or may not have roofs and walls, depending upon the purpose of the structure as stated in Alabama, NRCS Conservation Practice Standard, Livestock Shelter Structure, Code 576 (CPS 576). Structures without roofs and constructed for shade only should be covered with an ultra-violet protected polypropylene fabric (shade cloth) specifically designed by the manufacturer to provide at least an 80 percent sun-light reduction.

Portable units are usually built of steel pipe and should be built on skids to facilitate movement and should be sized for practical relocation. An individual portable unit should not be larger than 25 feet by 42 feet.

The amount of artificial shade required is dependent upon the amount of natural shade available and the type of animal. An NRCS technician can help determine the amount of shaded area to be constructed.

Livestock shelter structures should be located:

- on well-drained sites,
- no less than 200 ft. from any surface water body,

- at least 150 ft. from an up-gradient well,
- at least 300 ft. from a down-gradient well, and
- at least 50 ft. from any building or structure that would obstruct the circulation of air.

Proximity to livestock water and minerals should be strategically planned so as to create a desired livestock-grazing pattern.

Permanent structures may need heavy use area protection in the shaded area (see Alabama NRCS Job Sheet AL561, Heavy Use Area Protection).

The long axis of shade structures should be generally oriented in the north-to-south direction to maximize shade and keep the shaded area as dry as possible. If animals are confined under the structure, an east-to-west orientation is more desirable. If the structure has walls, the orientation should be selected to provide the maximum protection for the livestock.

## OPERATION AND MAINTENANCE

Livestock shelter structures properly constructed can last for years. The fabric used on shade structures will eventually degrade due to environmental conditions and will need to be replaced. Storing the fabric during the winter months can extend the useful life of the fabric. The fabric should always be kept tight so that it will not be damaged by wind. Portable structures must be moved periodically to prevent destruction of vegetation.

## REFERENCES

AL NRCS CPS Livestock Shelter Structure – Code 576  
AL NRC Job Sheet No. AL561

## Livestock Shelter Structure Worksheet

Land User: \_\_\_\_\_ County: \_\_\_\_\_ Date: \_\_\_\_\_

Farm No.: \_\_\_\_\_ Tract No.: \_\_\_\_\_ Assisted by: \_\_\_\_\_

**Size of Structure:** Length \_\_\_\_\_ ft. x Width \_\_\_\_\_ ft. (limited to 25 ft. x 50 ft.)  
(Roof or Cover)

**Distance to:** any surface water \_\_\_\_\_ ft. (minimum of 200 ft.)  
up gradient well \_\_\_\_\_ ft. (minimum of 150 ft.)  
down gradient well \_\_\_\_\_ ft. (minimum of 300 ft.)

**Shade Cloth Material Type:** \_\_\_\_\_

Shade Level: \_\_\_\_\_ % (minimum 80%)

<b>Table 1- Recommended Shade Requirement.</b>	
<b>Animal Type</b>	<b>Recommended Shade Requirement <sup>2</sup> (ft /hd)</b>
400 pound calves	23
800 pound feeders	32
Beef cows	40
Dairy cows	50
Mature swine	20
Horses	60
Small ruminant	10