

# Livestock Shade Structure

Texas Job Sheet



## DEFINITION

A permanent or portable framed structure to provide shade for livestock that are adversely affected by heat from the sun or are excluded from natural shade.

## GENERAL INFORMATION

A livestock shade structure can be constructed permanently or as a portable unit. The structure is generally wood or steel pipe and supports an ultra-violet protected polypropylene fabric (shade cloth) specifically designed by the manufacturer to provide at least an 80 percent shade level.

Portable units 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 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 shade structures should be located:

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

The long axis of the shade structure should be generally oriented in the north-to-south direction to keep the shaded area as dry as possible. If animals are confined under the structure, an east-to-west orientation is more desirable.

## OPERATION AND MAINTENANCE

Livestock shade structures properly constructed can last for years; however, the fabric will eventually degrade due to environmental conditions and 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

NRCS *TX* Conservation Practice Standard  
Livestock Shade Structure - Code 717

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## Livestock Shade 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 42 ft.)

**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