

# Aluminum Shades

## For Cattle Prove Value

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The fact that cattle need shade during the summer is not new. However, there is some doubt as to the kind of shade, and how much we can afford to pay for adequate shade.

Shade studies at the university's Yuma Experiment Station were designed to provide some information on these subjects. The Yuma area lends itself well to study of this type since maximum temperatures frequently reach 110° and above for a period of three months or longer.



### Steers and Heifers Compared

Yearling steers (average weight 665 pounds) and yearling heifers (average weight 525 pounds) were placed on feed in June. All animals were fed a ration of alfalfa hay and milo grain. One group of cattle was in lots with solid shade constructed of aluminum sheeting.

One group had solid shade made of palm fronds and alfalfa straw thatch. One group had a broken type shade made of snow fence, and one group had no shade at all. All shaded groups had 40 square feet of shade per animal. The shades were all 10 feet high.

Largest gains, as noted in Table 1, were made by cattle under the aluminum shade, followed by thatch, snow fence, and open pens. Steers and heifers responded to the various types of shades similarly. However, the heifers were affected more severely by the lack of shade than the steers.

### Saving Was Considerable

There was a saving of \$3.85 and \$2.90 per 100 pounds of gain for steers and heifers, respectively, over the open pens. This is an average saving of \$7.15 per head for the entire feeding period, as detailed in Table 2.

It might be expected that the aluminum shade would be too costly to construct, but in view of the savings in feed cost

**THREE SHADES** used in experiments at Yuma are shown at left. Top, palm fronds and alfalfa straw in solid shade. Center, snow fence crossed to provide 40 per cent of space with openings. Bottom, the solid aluminum shade.

they have just about paid for themselves the first year. This, along with the fact that there would be less maintenance and longer life in the case of aluminum shade, would seem to warrant their widespread use.

### Snow Fence Is Poor Shade

The cost of straw or snow fence shade is difficult to estimate. Thatch made more savings in feed cost than snow fence, which was only a little better than no shade at all.



### Cochise County

Mon., Tues., and Wed., 6:55 a.m.—KAWT, Douglas

### Coconino County

Tues. and Thurs., 8:10 a.m.—KCLS, Flagstaff

### Graham County

Sat., 10:00 a.m.—KGLU, Safford

### Greenlee County

Sat., 10:30 a.m.—KCLF, Clifton

### Maricopa County

Mon. thru Sat., 5:55 a.m.—KRUX, Phoenix

Sun., 8:45 a.m.—KOY, Phoenix

### Pinal County

Mon. thru Fri., 9:20 a.m.—KCKY, Coolidge

Sat., 7:30 a.m.—KCKY, Coolidge-Casa Grande

Sat., 12:30 p.m.—KPIN, Casa Grande

### Yavapai County

Mon., Wed., and Fri., 6:10 p.m.—KYCA, Prescott

Mon., Tues., and Fri., 12:15 p.m.—KNOT, Prescott

### Yuma County

Mon. thru Fri., 7:20 a.m.—KYUM, Yuma

**Table 1.—Average Gains for the Steers and Heifers Under the Various Shades (lbs. per day)**

	Aluminum	Thatch	Snow Fence	Open
Steers .....	2.00	1.77	1.77	1.64
Increase over open pens .....	0.36	0.13	0.13	—
Heifers .....	1.83	1.69	1.52	1.28
Increase over open pens .....	0.55	0.41	0.24	—
Average max. temperatures (F°).....	103.2	104.7	104.0	107.1

**Table 2.—Feed Costs for Steers and Heifers Under the Various Shades\* (cost per 100 lbs. gain)**

	Aluminum	Thatch	Snow Fence	Open
Steers .....	\$20.25	\$22.50	\$23.85	\$24.10
Saving over open pens .....	3.85	1.60	0.25	—
Heifers .....	19.80	21.40	22.40	22.70
Saving over open pens .....	2.90	1.30	0.30	—

\*Alfalfa hay @ \$30 per ton  
Milo grain @ \$60 per ton