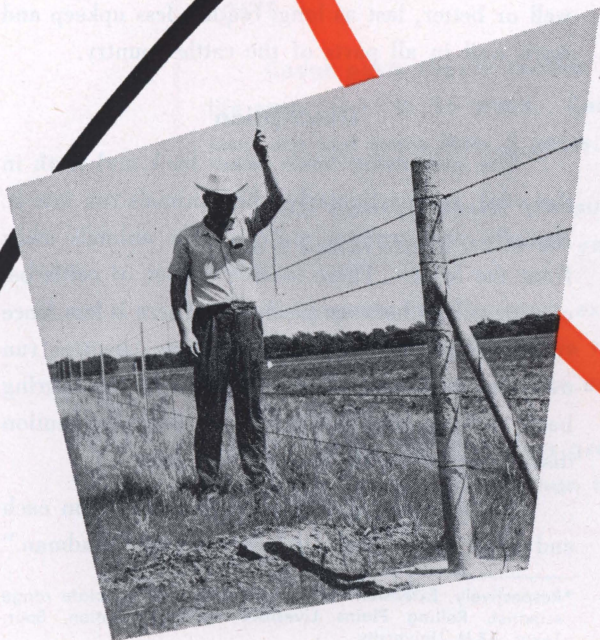


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SUSPENSION FENCES



TEXAS A&M UNIVERSITY
TEXAS AGRICULTURAL EXTENSION SERVICE
J. E. Hutchison, Director, College Station, Texas

Save with

SUSPENSION FENCES

*G. O. Hoffman, B. J. Ragsdale and W. J. Waldrip**

You can cut your fencing costs in about half by using suspension fences. Normally, fencing is a long, laborious and expensive job, but suspension fences tested at the Texas Agricultural Experiment Stations and on commercial beef cattle ranches have proved that total costs can be reduced greatly. A suspension fence is similar to other type fences, except the distance between line posts is from 80 to 120 feet.

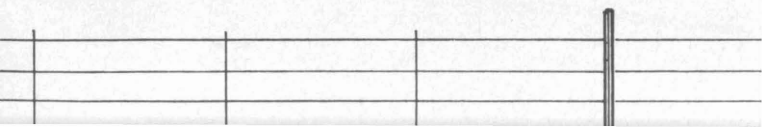
Suspension fences have these advantages over standard-type fences: They work well for boundary, interior and cross-fencing, turn cattle equally as well or better, last as long, require less upkeep and work well in all parts of the cattle country.

Description

The suspension fence sways back and forth in the wind, and particularly when animals run into it. Actually, the swaying motion beats animals away from the fence. There is little chance of cattle becoming mixed between pastures. There is less fence repair when herd bulls in adjoining pastures run over fences during fights, as the fence will spring back to its normal position. The swinging motion discourages fighting through the fence.

Anchor the suspension fence securely on each end with large posts, braces and a "deadman."

*Respectively, Extension range specialists and associate range scientist, Rolling Plains Livestock Research Station, Spur. Texas A&M University.



Space line posts from 80 to 120 feet apart. Place large support or stretch posts every $\frac{1}{4}$ mile along the fence to make it more sturdy or when the fence direction changes, uphill or downhill. In sandy soils, stretch posts may need to be spaced $\frac{1}{5}$ mile apart.

Line posts can be cedar, pressure-treated pine or steel and set not less than 2 feet deep. Wooden posts should be a minimum of $6\frac{1}{2}$ feet long with a 4-inch top. A $6\frac{1}{2}$ -foot steel post with anchor plates and wire slips should be sufficient. Use a longer and larger post in sandy soils where the posts should be set deeper.

The suspension fence usually consists of 4 to 6 strands of $12\frac{1}{2}$ -gauge barbed wire. Each strand of wire is stretched taut so there is not over a 3-inch sag between posts. The wire strands are separated with spiral wire stays placed 16 feet apart. Do not let the lower ends of the stays touch the ground, as this defeats the purpose of the suspension. The wire stays are 36, 42 or 48 inches long, depending upon the height of the top wire.

Anchor corner posts with a "deadman" set at least 4 feet deep or any other type anchorage that will hold firmly and satisfactorily under your soil conditions. Corner braces and support posts should be at least 8 feet long with an 8-inch top.

The wire strands can be fastened to wooden posts with long staples or a piece of 20-gauge metal strip, $\frac{1}{2}$ x 1 inch, placed over the wires and held with a 6-penny nail on each end. The staples or metal strips are fastened so as to allow the wire to move back and forth against the post. The wire strands are fastened to steel posts by the attached wire slips.

Construction Cost

Building a mile of suspension fence with wooden posts and stays placed 16 feet apart costs about \$350. This is itemized as follows: 16 rolls wire—\$160; 53 line posts—\$21; corner and stretch posts—\$8; 330 spiral wire stays—\$20; metal strips, nails, brace-wire, etc.—\$6; and 108 hours labor—\$135.

A standard fence with line posts at 20-foot spacing would cost about \$600 per mile.

Semisuspension Fence

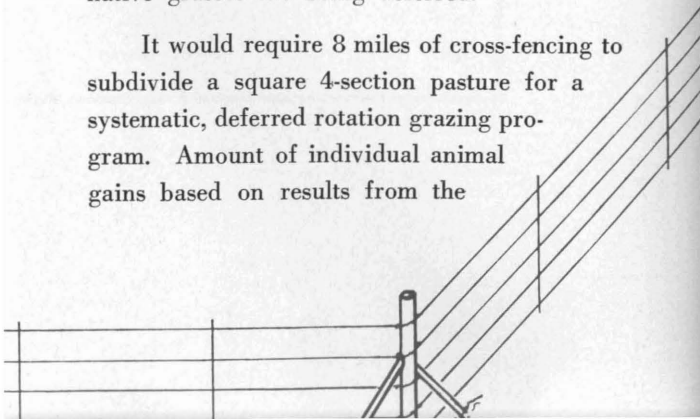
An adaptation of the suspension is the semisuspension fence. The semisuspension fence has line posts spaced 50 feet apart. This fence has proved successful for cross-fencing on several cattle ranches.

Where to Use Suspension Fences

Use suspension fences for cross-fencing when subdividing large pastures for a systematic deferred rotation grazing program. Place cross fences according to range sites to insure proper forage plant utilization, proper distribution of livestock and ease in moving livestock at the end of deferment periods.

Suspension fences are excellent for keeping livestock in a temporary or improved pasture while native grasses are being deferred.

It would require 8 miles of cross-fencing to subdivide a square 4-section pasture for a systematic, deferred rotation grazing program. Amount of individual animal gains based on results from the



Sonora and Throckmorton Experiment Stations indicates that the initial cost for 8 miles of fencing could be repaid in about 8 years. Gains on individual beef animals have been 25 to 100 pounds more per head than when the animals were grazing on a continuous year-long basis at the same stocking rates. Also, range conditions improved from

fair to good in 10 years. Carrying capacities can be increased whenever range conditions are improved permanently.

Fencing large pastures is necessary to establish and carry out systematic, deferred rotation grazing programs for fast range improvement and sustained livestock production.

Points to Consider When Purchasing Fencing Material

WIRE

Foreign made wire is about \$2 per roll cheaper than domestic wire. The workability, quality and uniformity of domestic wire is superior to foreign wire.

POSTS

Cedar posts should contain at least 2/3 the diameter in heartwood for a life span of 15 to 25 years. Cedar posts with a smaller amount of heartwood may not last more than 5 years.

Pine posts, properly pressure-treated with suitable preservatives, should have a useful life of 20 to 30 years.

Steel posts are the most expensive, but they can be set faster. Usually, they have a shorter useful life than pressure-treated pine posts or high grade cedar posts, particularly in the eastern part of the State.

The useful life of a fence generally is shorter in the eastern part of the State and along the Gulf Coast than in West Texas.