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Is Native Range the Best? Some Pasture Mangement Alternatives

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Is Native Range the Best?
SOME PASTURE MANAGEMENT ALTERNATIVES

by
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More intensive pasture management may be one way South Dakota farmers and ranchers can increase income from their cow-calf operations. At least production data collected from several pasture systems at the Pasture Research Center, Norbeck, South Dakota supports this assertion.

Data on four pasture systems are compared here. The pasture systems are native range; native pasture interseeded with alfalfa; short-season pasture consisting of alfalfa-bromegrass -intermediate wheat grass; and full-season pasture consisting of a series of pastures of crested wheat grass, alfalfa-bromegrass-intermediate wheat grass, switchgrass and Russian Wild rye. The data are discussed on a per 100 acre basis.

Productivity. The carrying capacity of the pasture alternatives varied with tame hay yields because each pasture alternative required differing periods of supplemental hay and corn feeding to carry the cows for an entire year. This can be seen in Figure 1. The short-season and full-season pastures carried the largest number of cows with the interseeded pasture also having an advantage over the native pasture. Purely from a productivity standpoint, the improved pastures all appear better than the native alone.

Costs. The improved pastures have additional costs compared to the native pasture. For example, pastures without legumes require annual fertilization to maintain high productivity levels and with more cows per acre the non-grazing season costs are higher. The end result is presented in Figure 2. The full-and short-season pastures have by far the largest annual costs per 100 acres with interseeded pasture costs also exceeding those of the native pastures. Thus, strictly from a cost standpoint, the native pasture requires a smaller cash flow.

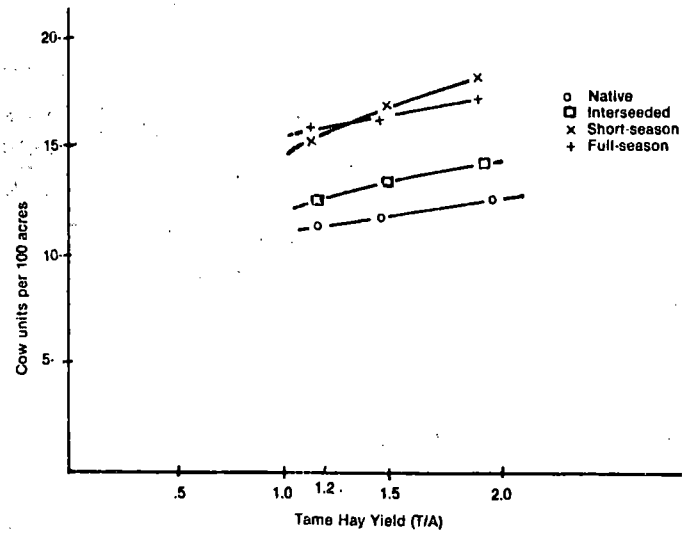

Fig 1. Carrying capacity per 100 acres of alternative pasture systems with varying tame hay yields.

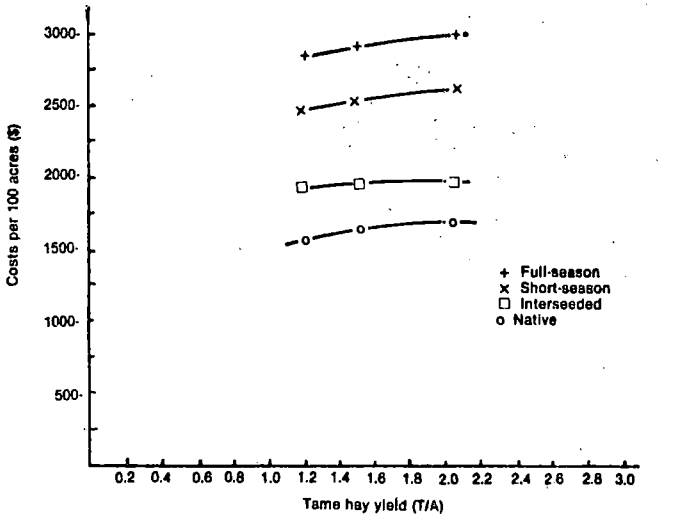

Fig 2. Beef cow-calf enterprise costs per 100 acres, not including return to land investment.

Net Returns. The "bottom line" for each pasture system is the net return to the operator's management and labor. Do the increased returns from pasture improvement cover the increased costs? The interseeded and short-season pastures increased net returns to the operator but the full-season pasture did not when compared to native pastures. (See Figure 3).

Although the full-season pasture returns a profit, the other alternatives result in greater profits. In areas where interseeding or short-season pasture production are possible, pasture improvement can enhance returns to the operator's labor and management without acreage expansion.

A more thorough coverage of these pasture alternatives is contained in B-652, available from the Economics Department.

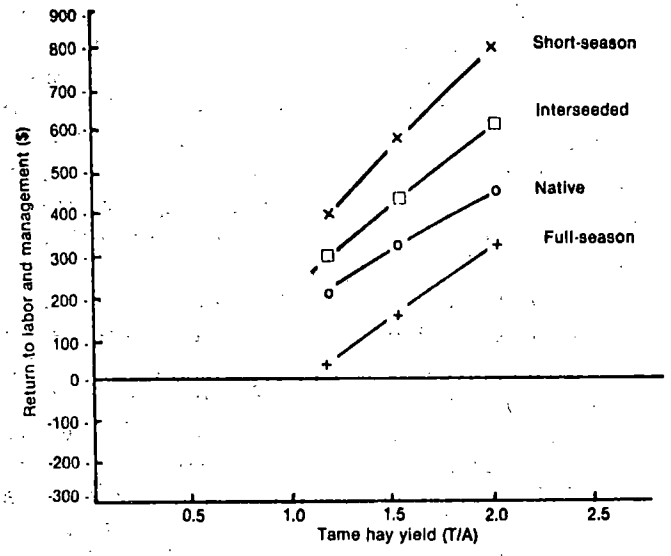

Fig 3. Return to labor and management from the beef cow-calf enterprise on 100 acres of land with varying tame hay yield and 92% calf crop.

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