## Minnesota - Does Renovation of a Tired Pasture Pay Off? Yes!

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A long-term continuously grazed pasture at Morris, MN, was renovated in replicated strips. For renovation, the pasture was grazed hard, regrown for two weeks, sprayed with a light dose of glyphosate to suppress growth, and inter-seeded with a no-till drill. The pasture was then rotationally grazed 5-7 times per year for three years.

Renovation with alfalfa or a diverse legume/grass mixture produced additional high quality pasture forage at a cost of only \$12/ton of dry matter. The combined effects of renovation, ½-day grazing periods, and four week rest periods increased annual pasture productivity over 160%.

## Profitability: It Isn't Just Milk Production Per Cow

Graduate Student Eb Ballinger studied the long-term impact of three levels of management in reduced-input dairy herds using stochastic modeling. Data from ten Minnesota farms were obtained to identify and categorize herd management levels. The University of Minnesota West Central Research Outreach Center grazing herd was the base herd for ten years of modeling. Herd profitability was measured as total sales less variable costs. Annual milk sales accounted for at least 85% of total sales in all simulations. Replacement and adult mortality and involuntary culling rates had greater impacts on herd profitability than the amount of feed supplemented during the grazing season or incidence of mastitis.