



KNEE-HIGH TO A HEIFER: Replacement heifer growth goals can be met with smart grazing management at substantially less cost than confinement.

Grazing dairy heifers 'in the money'

By **FAY BENSON**

NOT long ago, I asked a dairy farmer if he was interested in having his heifers custom-grazed.

His first question was: "How do the animals get back to the barn to get their total mixed ration?"

"Your heifers would be eating the grass in the pasture," I replied. "Grass?" he responded. "My heifers need more than just grass."

This attitude is changing as more dairy farmers learn that pasture forage can be a complete heifer feed, high in energy from young plants' digestible fibers. Grazing can reduce heifer-raising costs during the six months on pasture by 30 to 40 cents a day.

Properly done, grazing will support heifer growth to achieve a 22- to 24-month freshening date. And there are other benefits.

Heifer replacement programs are one of the largest dairy farm expenses. In a 2008 Cornell University study, 17 farms with above-average herd size brought confinement-raised replacement heifers into their milking herds at a cost of \$1,884 each.

These animals were calving at 22.9 months of age and weighed 1,290 pounds. They averaged

- Key Points**
- Higher confinement heifer costs lose ground to heifer grazing.
 - Grazing can cut costs 30 to 40 cents per head per day.
 - Growth goals can be matched with intuitive management.

1.73 pounds of gain per day with a total raising cost of \$2.49 per day per heifer, or \$1.45 per pound of gain.

Confinement feed costs were the most significant expense, followed by labor. The study used \$30-per-ton corn silage and \$40-per-ton haylage.

You know what those feed costs have done since 2008. Both forages have risen about 20%, to close to \$36 per ton for silage and \$48 per ton for haylage.

Grazing's cost savings

Grazing's biggest cost savings comes in your feed bill. Pasture forage costs are much lower since the animals do the harvesting and feeding of the forage, and there's no storage cost. Labor costs are also reduced.

Typical custom-grazing costs in New York range from \$1 to \$1.40 per head per day. All other cost for buildings and machinery would remain the same

	Feed, labor costs per head per day for heifers in confinement		
	201 to 700 pounds	701 to 850 pounds	851 pounds to calving
2007	\$1.30	\$1.50	\$1.60
2013	\$1.50	\$1.70	\$1.80

since they're needed for winter housing. But you can see that by grazing on your farm or using a custom grazer, there will be a cost savings to the heifer owner.

Hitting target growth

Via a Northeast Sustainable Agriculture Research and Extension grant, forage samples were taken from pastures being grazed by dairy heifers. Tested samples were entered into the Cornell Net Carbohydrate and Protein System model. Since forage grazing varied throughout the season, average daily gains did the same.

Gains varied between 1.25 and 2 pounds per head per day due to changes in the forage plants and pasture maturities. The computed average daily gain on only pasture was 1.54 pounds per day.

Gains in the actual heifer group at Groton, N.Y., in this study averaged 1.7 pounds per day. To achieve that, select

feeding of concentrates was used to offset the grass quality variations during the grazing period from May to late September.

The heifers were fed 2 pounds of concentrate the first two weeks, and again during the final three weeks to compensate for declining pasture quality. So, increased management is required due to the changing nutrient, digestibility and forage regrowth rates during grazing season.

If you can manage those variables, you can take advantage of grazing's cost savings.

For more on grazing nutrition, health and management of pastured heifers, consider a workbook authored by Dr. Sam Leadley of Attica (N.Y.) Veterinary Associates and me. You can find it online at smallfarms.cornell.edu/files/2012/04/booklet-1dr7xgk.pdf.

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