

REDUCING THE COSTS OF RAISING DAIRY HEIFERS BY GRAZING

But Still Achieving Targeted Growth Goals

Fay Benson, Cornell cooperative Extension - South Central New York Dairy Team

Dairy replacement programs within dairy farms are one of the largest expenses for dairy farms. In a 2008 study from Cornell’s Department of Applied Economics and Management (AEM), seventeen above average herd size farms with high levels of management, showed dairy replacements entering the herd with a total investment of \$1,884 per animal. These animals were calving at 22.9 months of age and weighing 1290 pounds. The animals averaged 1.73 pounds of gain per day at a total raising cost of \$2.49 per day per heifer, or \$1.45 per pound of gain. Feed costs were the most significant cost, followed by labor. Through the use of management intensive grazing some New York Dairies are savings \$130 - \$330 in labor & feed costs per animal entering the herd. If we were to update the 2008 feed costs with today’s cost of forage and grain the savings would be higher.

| STAGE OF HEIFER GROWTH | 201 – 700 LBS | 701 – 850 LBS | 851 - Calving |
|-------------------------------|---------------|---------------|---------------|
| Confinement Feed and Labor~ | \$2.18 | \$2.76 | \$3.69 |
| Management Intensive Grazing* | \$1.30 | \$1.50 | \$1.50 |
| Cost Difference /Day | \$0.88 | \$1.26 | \$2.19 |
| Times 150 Day Grazing Period | \$132 | \$189 | \$329 |
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~Confinement Feed & Labor Costs taken from “**Dairy Replacement Programs: Costs & Analysis**” AEM - EB 2008-16

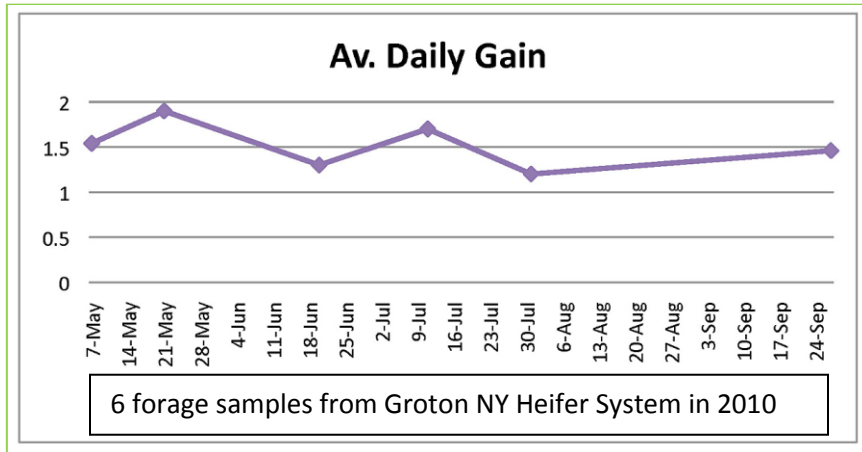
*Typical daily charge for custom heifer grazing in 2011.

Targeted Growth Goals with Grazing Forage Alone or Through Feeding Additional Concentrate

Through a NE Sustainable Agriculture Research and Extension Grant (NE SARE) regular forage samples from pastures being grazed by dairy heifers. The samples were entered into Cornell’s CNCP model, it showed grazing forage varied throughout the season, this meant that the ADG varied as well. See ADG Table below.

The forage grazed by the heifers varied throughout the season. This was due to the changes to the forage plants and the maturity of the pastures given to the heifers. The computed ADG if pasture was the only feed was 1.54 lbs/day. The actual result for ADG for the group of heifers in this study was 1.7lbs per day. To achieve this, select feeding of concentrate was used to offset the transition to grazing the

heifers were fed 2lbs of concentrate the first 2 weeks, and 2lbs again during the final 3 weeks to compensate for the declining pasture quality. These changes increased the ADG to 1.7 lbs/day for the group of heifers.



The points in the table to the left indicate the ADG for heifers fed pasture forage alone.

These results can be manipulated to reach desired goals by careful grazing management or additional grain being fed.

To achieve targeted goals it is important to follow guidelines set out in the fact Sheets included in this publication or available soon at: <http://grazingguide.net/extension>

There are many more variables to grazing heifers vs. feeding them in confinement. Understanding the variables and managing them will allow dairy farmers to take advantage of the costs savings which are associated with grazing. For more information on nutrition for grazing Heifers see Fact sheet #2 “