

# TECHNICAL BULLETIN

## DAIRY



## BIRD'S NEST DRY COW DIETS: SUCCESS IN THE FIELD

Bird's Nest Dry Cow Diets are bulky, high forage diets – dietary energy is from corn silage with little or no grain fed. These diets contain 6-12 lbs/day of low quality forage such as straw, corn stover, or grass hay, to dilute the dietary energy content. Research has demonstrated that preventing energy over consumption during the dry period improves post-calving dry matter intake, milk production, and energy balance (Dann, et. al 2006). This bulletin provides practical considerations for utilizing the Bird's Nest approach.

### Items to Remember:

The rough forages in Bird's Nest Dry Cow rations have low nutritional quality, but must be of good feed quality. Straws, grass hays, and corn stalks utilized in Bird's Nest rations must be free of mold and have minimal weather damage. Also, processing of rough forages to approximately 2" length encourages consumption of the forage. Remember that consumption of the rough forage lowers diet energy density consumed by the cow, which is the key to this ration approach. In addition, bulky, rough diets take longer for cows to eat, so provide continuous, non-crowded access to the TMR. Feed should be pushed up several times daily. Also, monitor forage dry matter content – large changes in forage dry matter content may affect the ration dry matter proportions and energy intake. Good feeding and facilities management are essential for ensuring success of the Bird's Nest ration approach (Drackley et al., 2007).

### Success Story:

QLF farm demonstration data shows that liquid supplements are a valuable part of a successful Bird's Nest dry cow ration program. The following chart details Dairy Comp 305 data from a herd for 14 test periods pre and post Custom Dry Cow Optimizer inclusion. QLF Custom Dry Cow Optimizer products provide all supplemental macrominerals, microminerals, vitamins, and additives into the Bird's Nest Dry Cow ration. The farm began feeding a Custom Dry Cow Optimizer in April 2006, as part of a Bird's Nest dry cow ration program. (Prior to April 2006, the farm utilized a Bird's Nest ration, but with dry mineral). During the test periods, the herd expanded but continued to use the same dry and prefresh facility. Expansion is complete, and the farm now milks 650 cows. Note that this is a well managed herd – the pre-liquid incidence of metabolic diseases is near goal.

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Item	% Goal <sup>a</sup>	Avg.Pre	Avg.Post	% Reduction or Increase
Peak Milk Lact.>1	NA	112.43	117.29	4.32
% Adults Left Herd <sup>b</sup>	NA	2.94	2.55	-13.5
% Clinical Mastitis <sup>c</sup>	20	15.9	11.43	-28.12
% Uterine Problems <sup>c</sup>	5-7	4.99	2.19	-56.19
% Milk Fever <sup>c</sup>	<3	1.59	0.94	-40.87
% DA's <sup>c</sup>	<3	6.23	3.98	-36.09
% Ketosis <sup>c</sup>	20	13.35	9.23	-30.83

<sup>a</sup>Adapted from Nordlund & Cook (2004); Smith (2002)

<sup>b</sup> Calculated as % of cows freshened

<sup>c</sup> Calculated as % of cows in milk

## Conclusion:

In conclusion, QLF Dry Cow Optimizers fit well into a Bird's Nest Dry Cow program. QLF Dry Cow Optimizer supplements provide readily available energy and nitrogen to stimulate microbial growth and forage utilization, which is especially important for high forage diets. In addition, physical benefits provided by liquid supplements enhance diet palatability as well as forage, nutrient, and additive consumption. Ultimately, these nutritional and physical benefits help improve the success of a well-managed Bird's Nest Dry Cow Ration approach. See Technical Bulletins 4313 and 4314 for specific details regarding nutritional and physical benefits provided by Dry Cow Optimizers within Bird's Nest Dry Cow Diets. Also see TB 4312 for details of University research supporting Bird's Nest Dry Cow diets.