



DAIRY
Feed Management Plan Checklist

Feeding management is one of six components of a Comprehensive Nutrient Management Plan (CNMP) as defined by the Natural Resource Conservation Service. Feed management practices may reduce the volume and nutrient content of manure and may be an effective approach to minimizing the import of nutrients to the farm. Feeding management as part of a CNMP should be viewed as a "consideration" but not a "requirement" as some practices will not be economical on some dairies. The following checklist is designed to assist dairy producers and their nutrient management advisor to determine feeding management factors that affect nutrient management. The checklist is meant to be used as an *on-farm* assessment tool. The factors contained in this assessment can be used as a guide to document or identify feeding management practices that will contribute to achieving nutrient balance at a whole farm level. Nitrogen and phosphorus are the two nutrients that are required to be managed as part of a CNMP. When nitrogen and phosphorus imports exceed nitrogen and phosphorus exports there is an imbalance at a whole farm level. These imbalances may lead to impaired water quality in nearby water bodies due to both surface runoff or leaching of nutrients to ground water. Excess nitrogen can also be volatilized and contribute to impaired air quality. Potassium is a nutrient that can lead to production and health problems if it is not monitored in dairy rations, therefore it is included as a nutrient to monitor in this checklist.

Dairy Name Werkhoven Dairy

Date Completed 6-21-06

Producer Signature _____

Adviser Signature _____

On the following pages is a list of feeding management practices that can affect nutrient balance. Please read through each feeding management consideration and record your answer.

Feed Management Considerations	Was it considered?		Will it be economical?		Will it be implemented?		Will it be considered in the future?		Environmental benefit
	Yes	No	Yes	No	Yes	No	Yes	No	
Targeting Nutrient Requirements									
Formulate multiple rations to meet nutrient requirements of cattle (high producing, low producing lactating, dry, multiple heifer groups)	✓		✓		✓		✓		N, NH ₃ , P
Analyze CP content of rations routinely	✓ <i>done forages</i>		✓		N/A		N/A		N, NH ₃
Analyze P content of rations routinely	✓ <i>done forages</i>		✓		N/A		N/A		P
Analyze K content of early lactation rations routinely (DCAD positive)	✓ <i>done forages</i>		✓		N/A		N/A		K
Analyze K content of pre-fresh ration routinely (DCAD negative)	✓ <i>done forages</i>		✓						K
Determine dry matter intake	✓ <i>done on coen silage</i>		✓		N/A		N/A		N, NH ₃ , P
Monitor dry matter content of forages and wet feedstuffs	✓		✓		N/A		N/A		N, NH ₃ , P

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	Yes	No	Yes	No	Yes	No	Yes	No	
Ration Balancing									
Reformulate rations routinely for the following:									N, NH ₃ , P
a) Forage quality (NDF, ADF, CP, P, starch)	✓		✓		N/A		N/A		N, NH ₃ , P
b) Changes in ration feedstuffs	✓		✓		N/A		N/A		N, NH ₃ , P
c) Dry matter content of forages	✓		✓		N/A		N/A		N, NH ₃ , P
d) Formulate for positive or negative DCAD rations (Na, K, Cl, and S)	✓		✓		N/A		N/A		K
e) Balance rations using either rumen degradable protein or amino acid content	✓		✓		N/A		N/A		N, NH ₃

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	Yes	No	Yes	No	Yes	No	Yes	No	
Ration Management Practices									
Feed for limited feed refusal in lactating ration	✓								N, NH ₃ , P
Assess feedbunks routinely and maintain a consistent and fresh feed supply	✓								N, NH ₃ , P
Use total mixed rations									N, NH ₃ , P
a) Follow manufacturers suggested order of loading feeds in mixer	✓ depends on hay quality		✓			N/A		N/A	N, NH ₃ , P
b) Monitor loading and scale accuracy	✓		✓						N, NH ₃ , P
c) Evaluate mixing process	✓ depends on hay		✓			N/A		N/A	N, NH ₃ , P
Use computer grain feeders		✓		✓		✓		✓	
Clean feedbunks daily	✓								
Clean water troughs regularly	✓	2x/wk	✓			N/A			

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	Yes	No	Yes	No	Yes	No	Yes	No	
Production Aids/Enhancers									
Direct fed microbials/yeast	✓		✓		N/A		N/A		
Rumensin	✓		✓		N/A		N/A		
BST	✓		✓		N/A		N/A		
Monitoring Tools									
Use Milk Urea Nitrogen (MUN) to assess nitrogen utilization	✓		✓		N/A		N/A		N, NH ₃
Monitor N intake/N output	✓		✓		N/A		N/A		N, NH ₃
Monitor water quality for minerals and nitrates	✓			✓		✓		✓	
Estimate P balance (Does milk P export approximate feed P import)	no added P and no control over other feed P not considered beyond that								
Monitor feed efficiency (lbs milk / lbs DMI)	✓		✓		N/A		N/A		N, NH ₃ , P

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	Yes	No	Yes	No	Yes	No	Yes	No	
Forage Management Practices									
Maximize the amount of home grown forages in ration	✓		✓		N/A				
Maximize quality of home grown forages (CP, NDF, NDF digestibility, lignin, starch) by adopting the following practices:			✓		N/A				
a) Harvest crop when nutrients such as protein (grass/legume) or starch (corn) are high and fiber is low	✓		✓		N/A				
b) Pack silage tightly, cover quickly, and use a proven silage additive	✓		✓		N/A				
c) Store different quality forages separately to match nutrient level of forages to nutrient requirement of animal	✓ hay only		✓		N/A				

d) Mechanically process corn silage	✓		✓		N/A				
e) Analyze all silages for fermentation profile, fiber digestibility, and particle size	✓		✓		N/A				

Information contained in this checklist assessment was developed by _____

_____. The suggested feeding management practices were the best management practices based on research and professional judgment.

Version Date March 2006