



Forage Management System Paving the Road to Profitability

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Dairy Business Management

- ⌘ What factor has the greatest influence on purchased feed costs?
- ⌘ What factor has a large impact on cow health and management?
- ⌘ What factor influences milk production?
- ⌘ What factor directly impacts 13 major expense categories?



Dairy Business Management

- ⌘ The forage management system is a critical component of dairy businesses
- ⌘ The system is fully intertwined in the operating costs, investment levels, and productivity of the business



Dairy Business Management

- ⌘ Well managed, is a competitive advantage for many businesses
- ⌘ Can also be a disadvantage
- ⌘ How can we look at all the management areas within the business so it will be more of an advantage instead of a disadvantage?



Forage Management System

⌘ Many different areas of the business associated with forage management

- ☑ Soil types
- ☑ Crop rotations
- ☑ Planting systems
- ☑ Harvesting methods
- ☑ Storage systems
- ☑ Feeding strategies



Forage Management System

- ⌘ While can look at each one independently, this may lead to the forage system being a disadvantage.
- ⌘ Decisions made in one area impact all of the other areas.
- ⌘ Thinking about as a system, and how to get the most out of the system, allows the farm to maximize profitability of the business, the “road to profitability”



Goals of the Forage Management System

- ⌘ Maximize profitable milk production by utilizing the highest quantity and quality of forage that can be produced cost efficiently given the resource restrictions of the business.

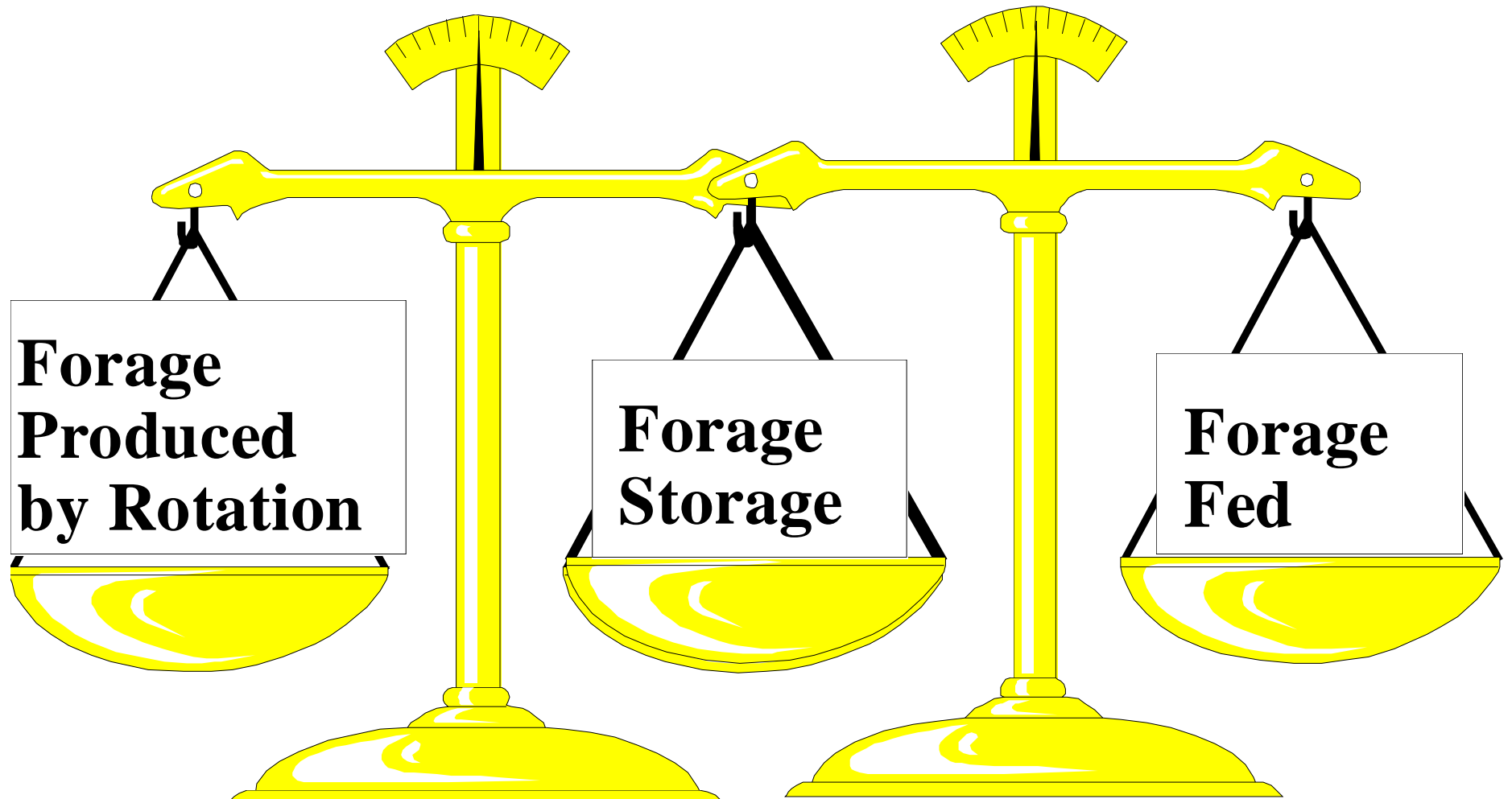


Question?

⌘ The dairy cattle nutritionist tells you that you would make more milk if you had alfalfa haylage in your ration. What may this lead to?

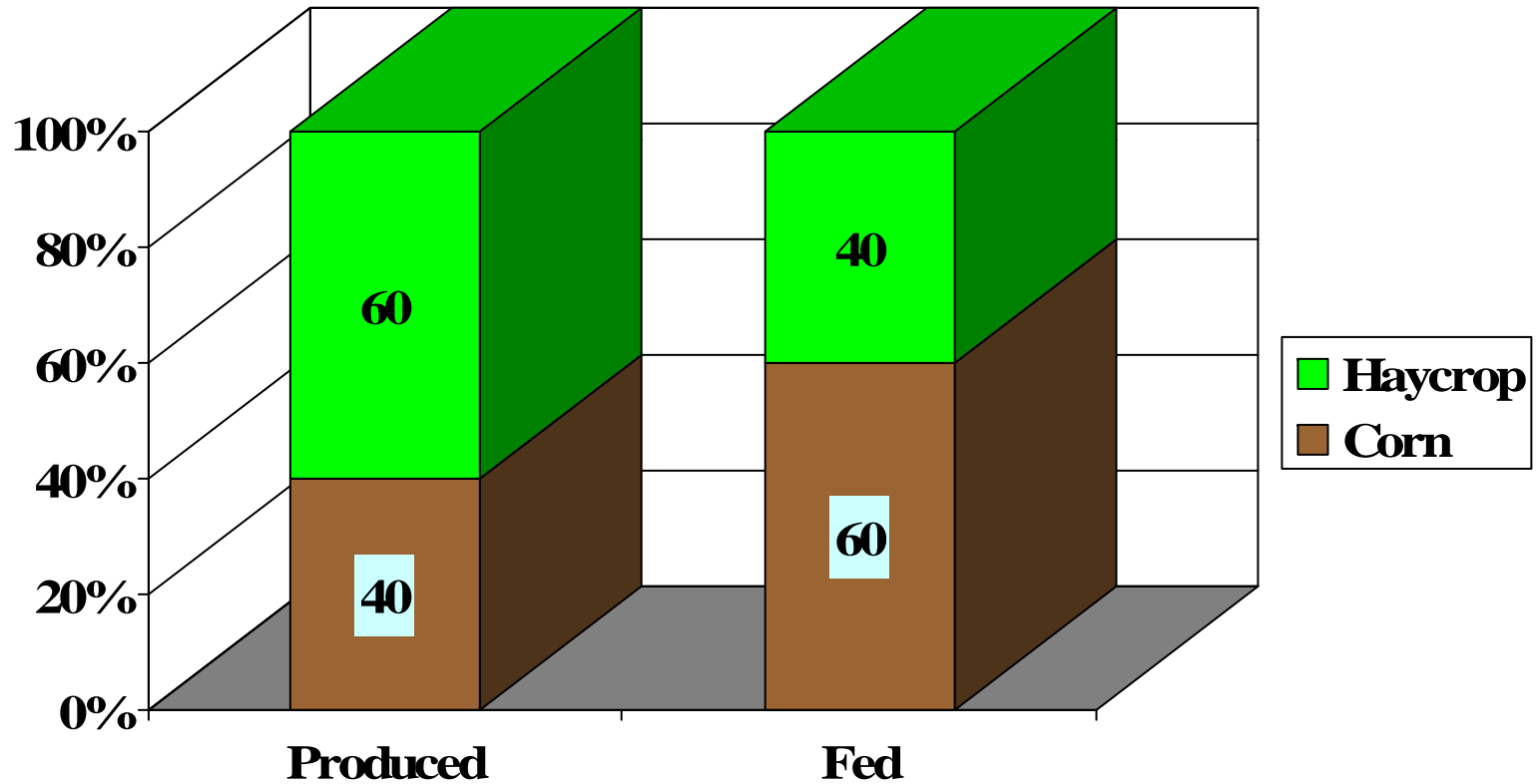


Systems Approach to Quality Forage





May Not Talk to the Crop Program





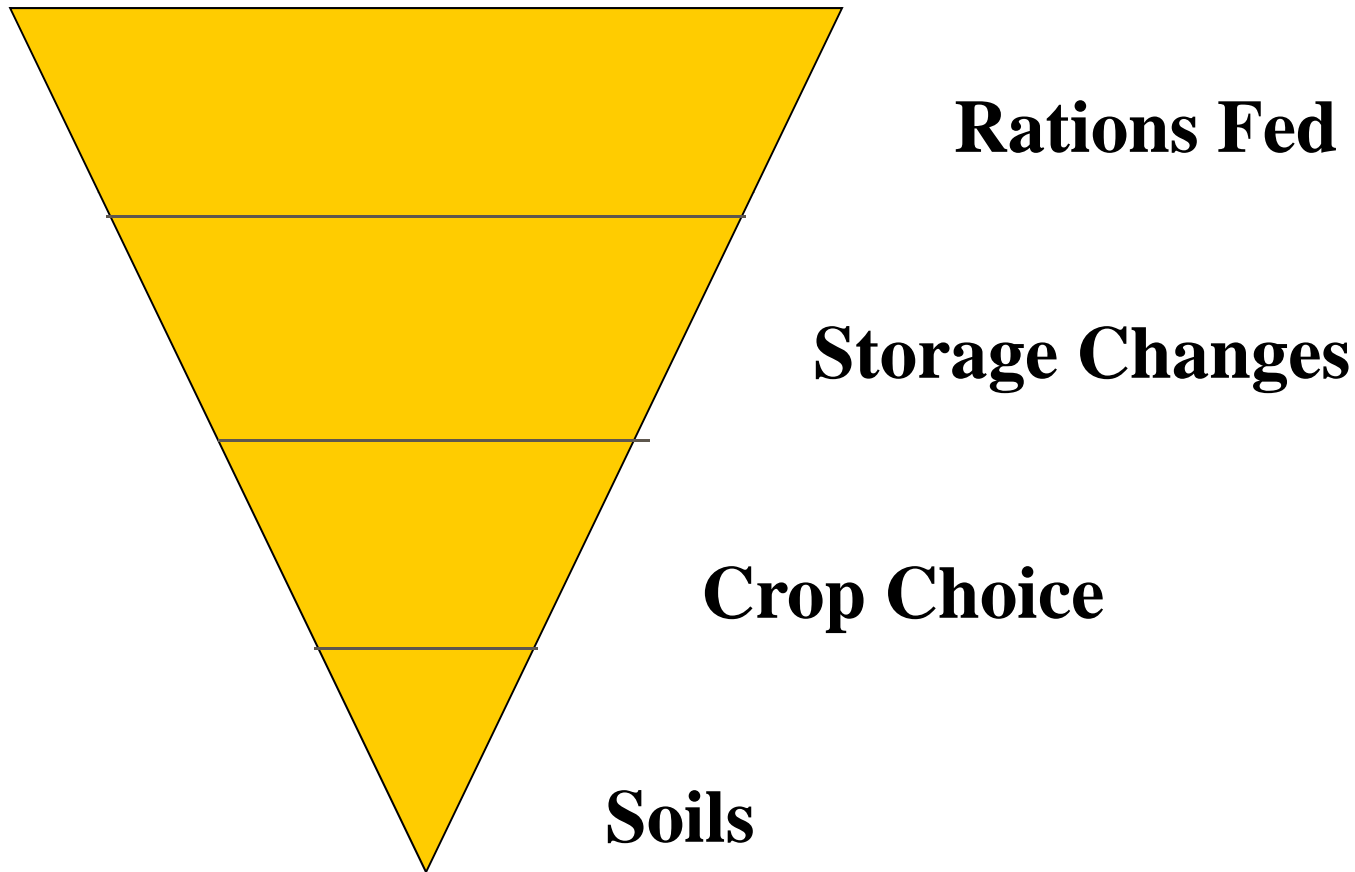
Potential Impacts on System

- ⌘ Change in rotations
- ⌘ Change in quantities
- ⌘ Change in land that may be needed
- ⌘ Change in costs
- ⌘ Change in feeding approaches

Will the switch to alfalfa be more profitable?



Degree of Change Available





Key Factors

- ⌘ Highest quantity
 - ⌘ Highest quality
 - ⌘ For land resources
 - ⌘ At reasonable cost
- ⌘ If forage becomes too expensive, than it no longer will be profitable. There is no blank check to get the best forage



Key Factors

- ⌘ However, many things can be done to improve quantity, quality, storage, and use of forages that may not add any costs, or may actually reduce costs
- ⌘ Matching all areas of the forage management system, starting with what works well with the land resource, becomes key to the success of the system



Value of Forage

- ⌘ With forage being the major feed source for our dairy cattle, changing the quality and the quantity available can have a large impact on farm profitability



Value of Forage – An Example

⌘ Base scenario

- ☑ Utilizing average corn silage and haylage at a restricted feeding rate
- ☑ Calculate net milk income over purchased grain and concentrate per cow
 - ☒ Component production
 - ☒ Cost of purchased inputs
 - ☒ Amount of purchased inputs utilized



Base Forage Quality

	Legume Haylage	Corn Silage
% Dry Matter	35	33
NDF	46	49
CP	17	9.5
Lignin	20	11
Sol-P	50	58
NPN	95	100
NDFIP	24	16
ADFIP	16	7



Base Senario - NMIOPGC

Milk per cow per day	75	
% Butterfat	3.8	
% Protein	3.1	
% OS	5.69	
Forage Fed, Dry Matter		25lbs
Net Milk Income over Purchased Grain and Concentrates	\$7.65	



Base Scenario – Push for Most Milk

- ⌘ Same quality of forage, now pushing the concentrates at maximum rate
- ⌘ Forage Fed, Dry Matter 24lbs
- ⌘ NMIOPGC now \$8.04
- ⌘ Change = \$.39 per cow per day
- ⌘ Percent change = 4.8%
- ⌘ Pushing the nutritional limit



Higher Forage Quality

	Legume Haylage	Corn Silage
NDF	37	41
CP	20	8
Lignin	17	7
Sol-P	60	50
NPN	70	100
NDFIP	18	16.4
ADFIP	12	7.88



High Quality, Limited tons

- ⌘ High quality forages, but limited tons available
- ⌘ Forage Fed, Dry Matter 31.5lbs
- ⌘ NMIOPGC now \$8.46
- ⌘ Change = \$.81 per cow per day
- ⌘ Percent change = 10.5%



High Quality, Sufficient Tons

- ⌘ High quality forages fed to highest rates and increasing concentrates
- ⌘ Forage Fed, Dry Matter 35lbs
- ⌘ NMIOPGC now \$8.58
- ⌘ Change = \$.93 per cow per day
- ⌘ Percent change = 12.2%



Summary Table

	NMIOPFG	Dollar	Percent	Annual Difference
	Per cow/day	Change	Change	Per 100 cows
				85% in Milk*
Average Forage, Limited Quantity	7.65	---	---	---
Average Forage, Unlimited	8.04	0.39	5.10%	\$12,100
High Quality Forage, Limited Quantity	8.46	0.81	10.07%	\$25,130
High Quality Forage, Unlimited	8.58	0.93	10.99%	\$28,853

*Only calculating change associated with forage quality impact on lactating animal's purchased feed costs with no estimation of impact on dry cows or replacement animals. This is not all profit as increased forage feeding may have higher costs associated with it.



Other Benefits of a Quality Forage Management System

- ⌘ Better cow health
- ⌘ Flexibility in handling weather variation
- ⌘ Improved sustainability of crop production
- ⌘ Better utilization of manure nutrients



Improving Profits Through the Forage System

- ⌘ Looking at the different scenarios highlight the potential to change earnings on a dairy farm
- ⌘ However, there may be costs associated with changing the forage production system



Improving Profits Through the Forage System

- ⌘ These costs will impact the change in earnings
- ⌘ Management goals are to determine which costs can be incurred that will generate positive results, vs. ones that may cost more than what is gained



Question?

- ⌘ The crop consultant says that the farm has been losing too much feed in the storage system and that this needs to be addressed. What things are impacted by this?



Potential Impacts on System

⌘ Change in forage feeding system.

☑ Quantity

☑ Quality

⌘ Change in number of acres needed.

⌘ Change in storage system.



Forage Management System

- ⌘ The focus of this program is on the pieces of the system
- ⌘ As you listen to the different presentations, think about what could be done differently within your business
- ⌘ Ask questions, as that is an important part of the meeting



Introduction to Case Farm

