Class Exercise 03

Least Cost Breeding (LC-B): Lactating Pregnant Cow

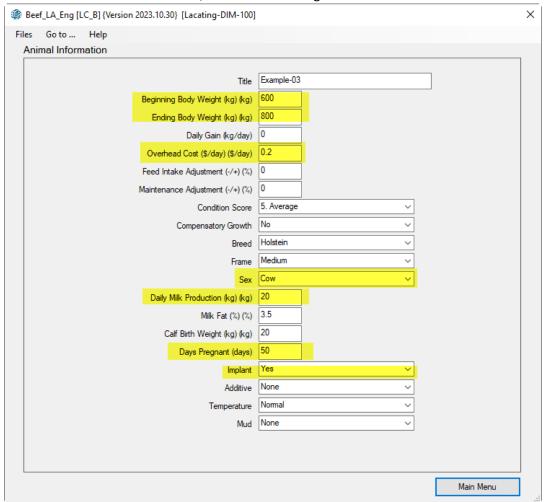
Attendees Group Number:

Attendees Names (Last Name, First Name, Initials)

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INPUT

- 1. Use your cell phone, and run the Taurus Mobile app.
- 2. Choose the local language such as Lao or Khmer or Vietnamese. Do not use thde English version.
- 3. From the main menu select the Least Cost Breeding (LC-B).
- 4. In the Animal Information screen, enter the following information:



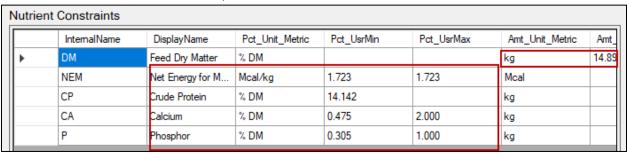
This a 700-kg Holstine cow of medium frame, with average condition score, producing 20 kg of milk per day with milk fat of 3.5%. The cow is 50-days pregnant, and the expected calf birth weight will be 30 kg. The overhead cost is 0.20 per day. We use implant but no feed additives. The temperature is normal and there is no mud.

Note that the 700-kg cow is entered with beginning weigh of 600 kg and ending weight of 800 kg, which is averaged as 700 kg.

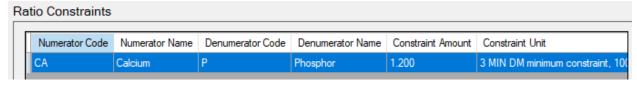
5. Goto Feeds screen and add the following feeds and then go to the Ration screen and enter the following prices:

Library	Feed Number	Feed Name	Feed Price
0	18	ALFALFA middlings bloom	137.79
0	30	ALMOND hulls 15 percent Crude Fiber	82.67
0	154	BUCKWHEAT grain	110.23
0	162	CALCIUM phosphate di	529.1
0	231	CORN grain flaked	132.28
0	267	FAT animal Hydroponic	264.55
0	383	MOLASSES cane	88.18
0	399	OAT hay dough stage	110.23
0	430	OYSTERSHELL ground	110.23
0	563	RICE hulls	0
0	675	UREA 45% nitrogen	264.55
0	692	WHEAT grain Soft red winter (SRW)	137.78

6. Go to the Nutrient Constraints screen, and recalculate nutrient constraints



- 7. Do not add any constraints for feeds and feed groups.
- 8. Go to the Ratio constraints and confirm that it is set as shown below:



9. Go to Reports screen and generate the report.

OUTPUT

Using the information in the report fill out the following tables:

Methane Emission:

Item	Value
Methane Emission in MJ per day per head (MJ/d)	
Methane Emission in Mcal per day per head (Mcal/d)	
Methane Emission in gram per day per head (g/day)	
Methane Emission in gram per kg of dry matter intake (g/kg)	
Methane Conversion Rate (%)	

Nutrients Requirements:

Nutrient	Description	Unit	Supplied	NRC	Meets Minimum NRC Requirements?
			by Ration	Min	
			Dry Matter		
DM	Intake	Kg			
NEM	Energy	Mcal			
СР	Protein	Kg			
CA	Mineral	%DM			
Р	Mineral	%DM			

Ration composition:

Feed Number	Feed Name	Kg As Fed	Price/day
18	ALFALFA middlings bloom		
30	ALMOND hulls 15 percent Crude Fiber		
154	BUCKWHEAT grain		
162	CALCIUM phosphate di		
231	CORN grain flaked		
267	267 FAT animal Hydroponic		
383	383 MOLASSES cane		
399	399 OAT hay dough stage		
430	430 OYSTERSHELL ground		
563	563 RICE hulls		
675	675 UREA 45% nitrogen		
692	WHEAT grain Soft red winter (SRW)		
	TOTAL		