

Forage Quality/Availability and Cow Requirements



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Forage Quality and Availability



Forage Scenarios

- **Abundant supply of high quality forage**
- **High quality forage, but limited supply**
- **Abundant supply of low quality forage**
- **Low quality forage, limited supply**

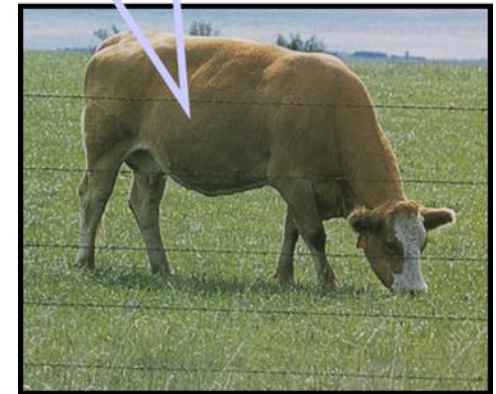
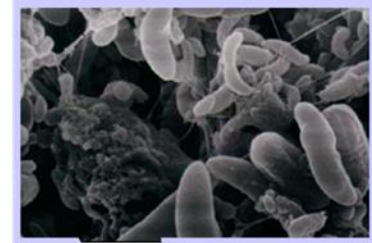
Energy and Protein

➤ Energy

- Often more limiting than protein
- Drives cow condition

➤ Protein

- Improves forage digestibility of dormant forage
- increases intake, energy availability and cow condition

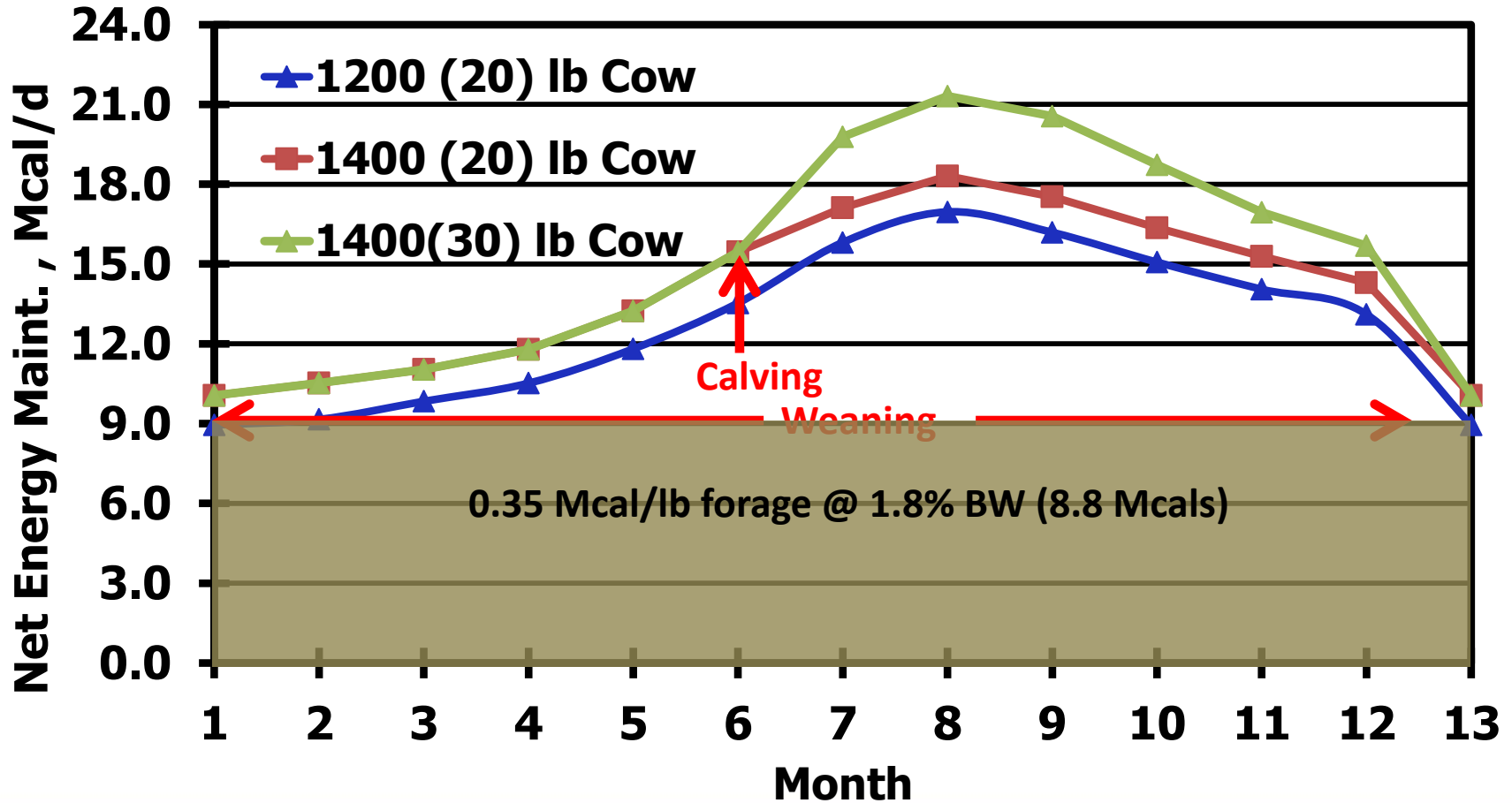


“What’s in Your Pasture”

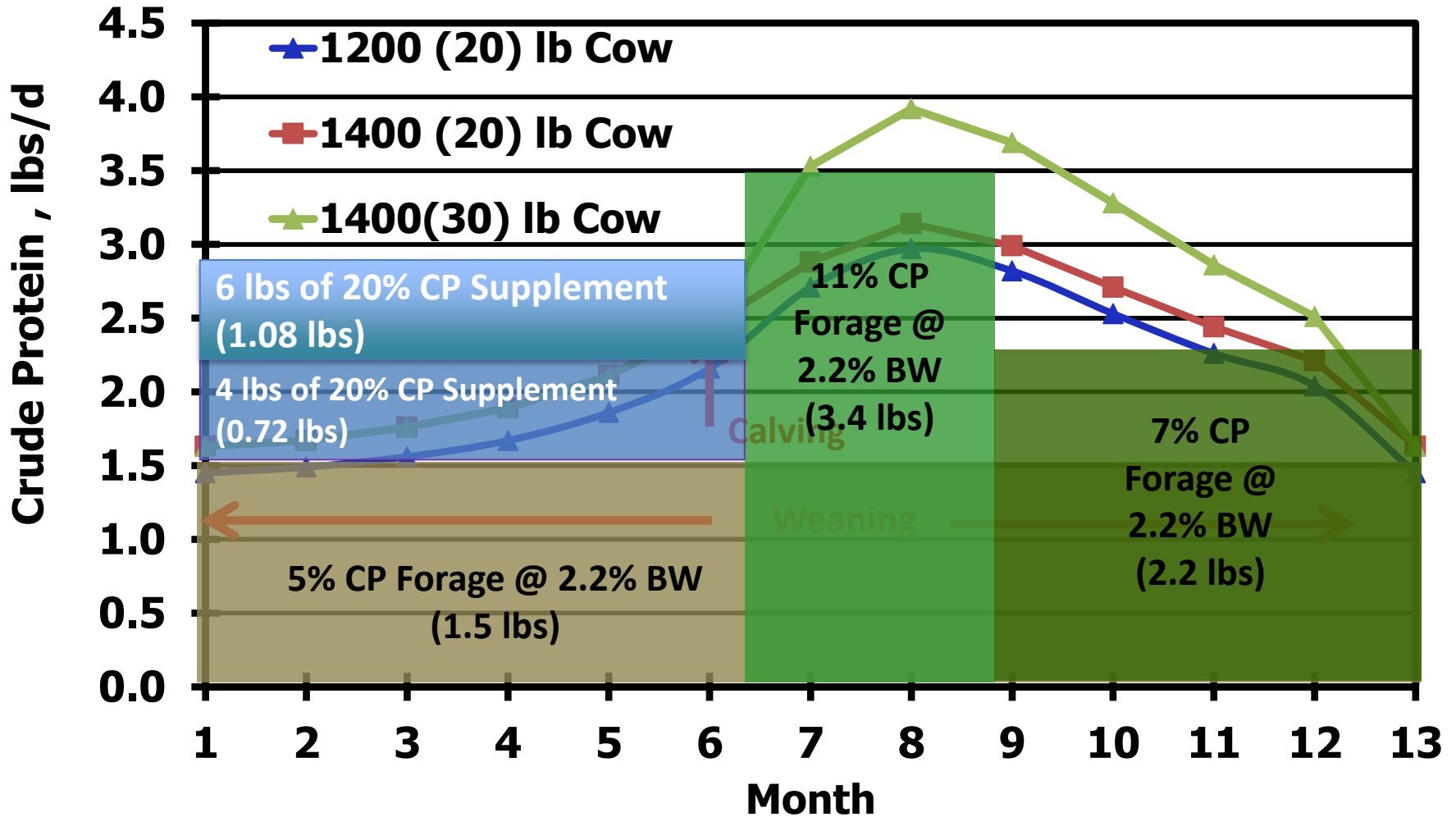


Energy Requirement and Supply

(Dormant Forage, No Protein Supplement)

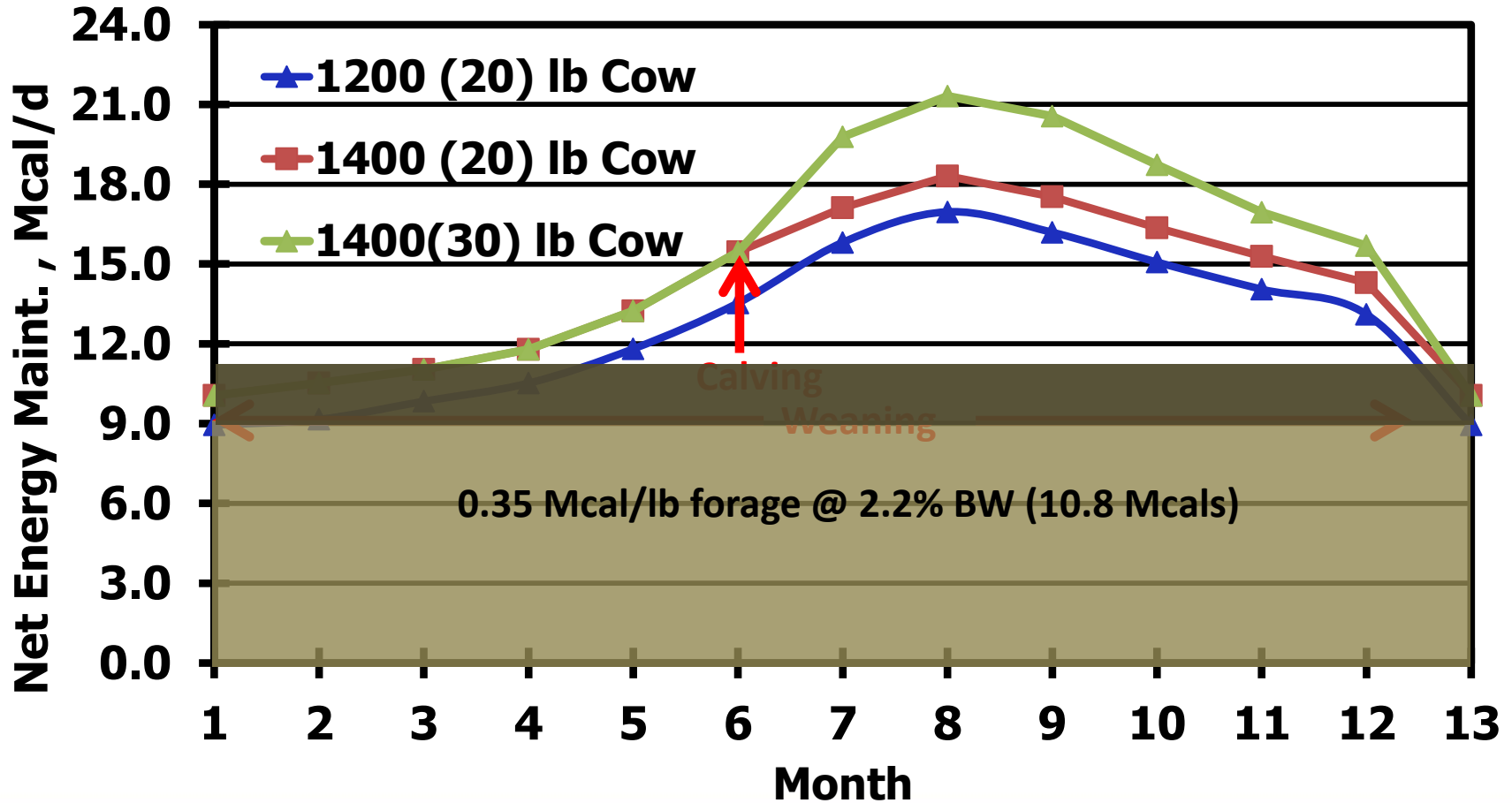


Protein Requirement and Supply

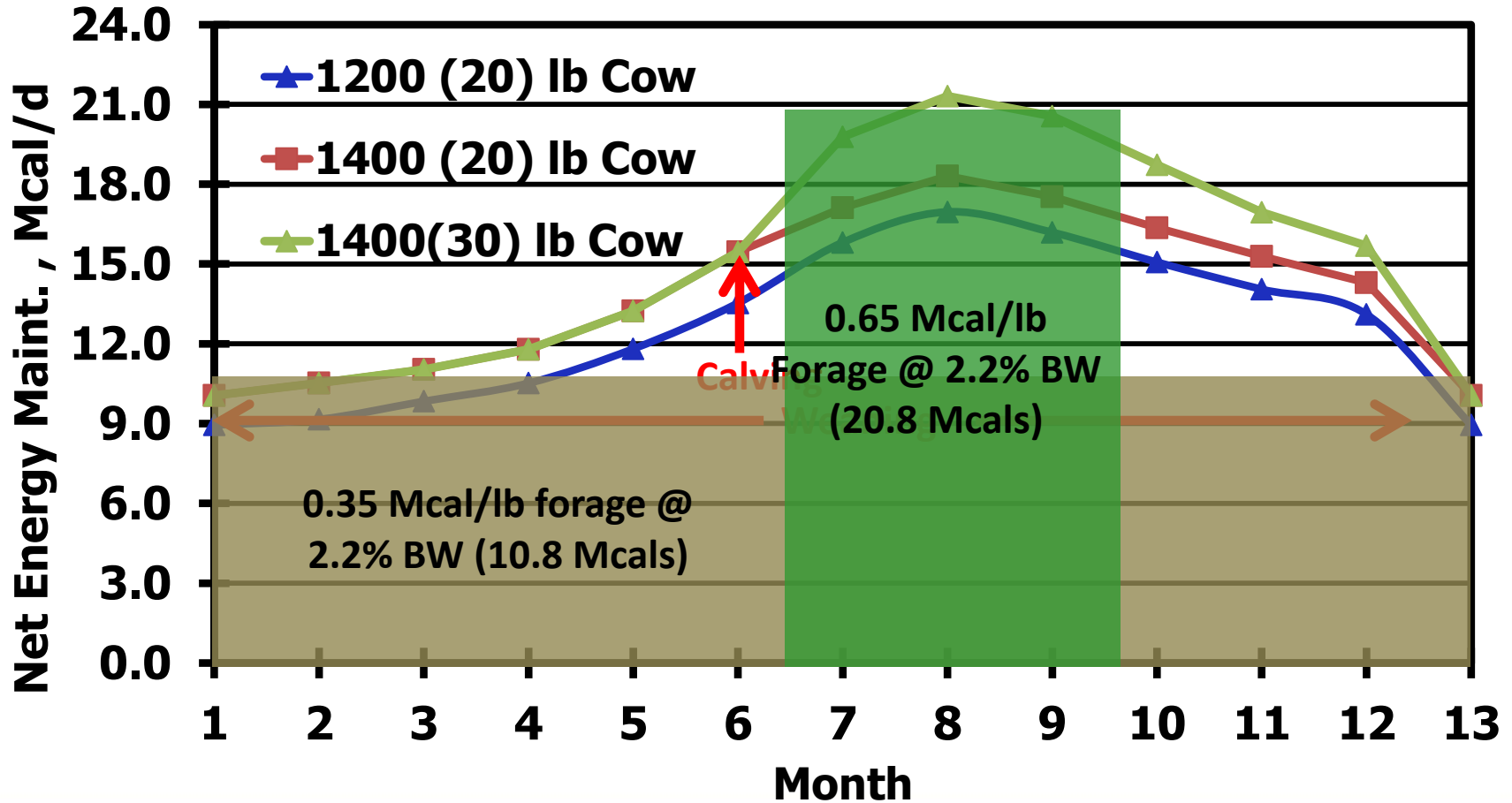


Energy Requirement and Supply

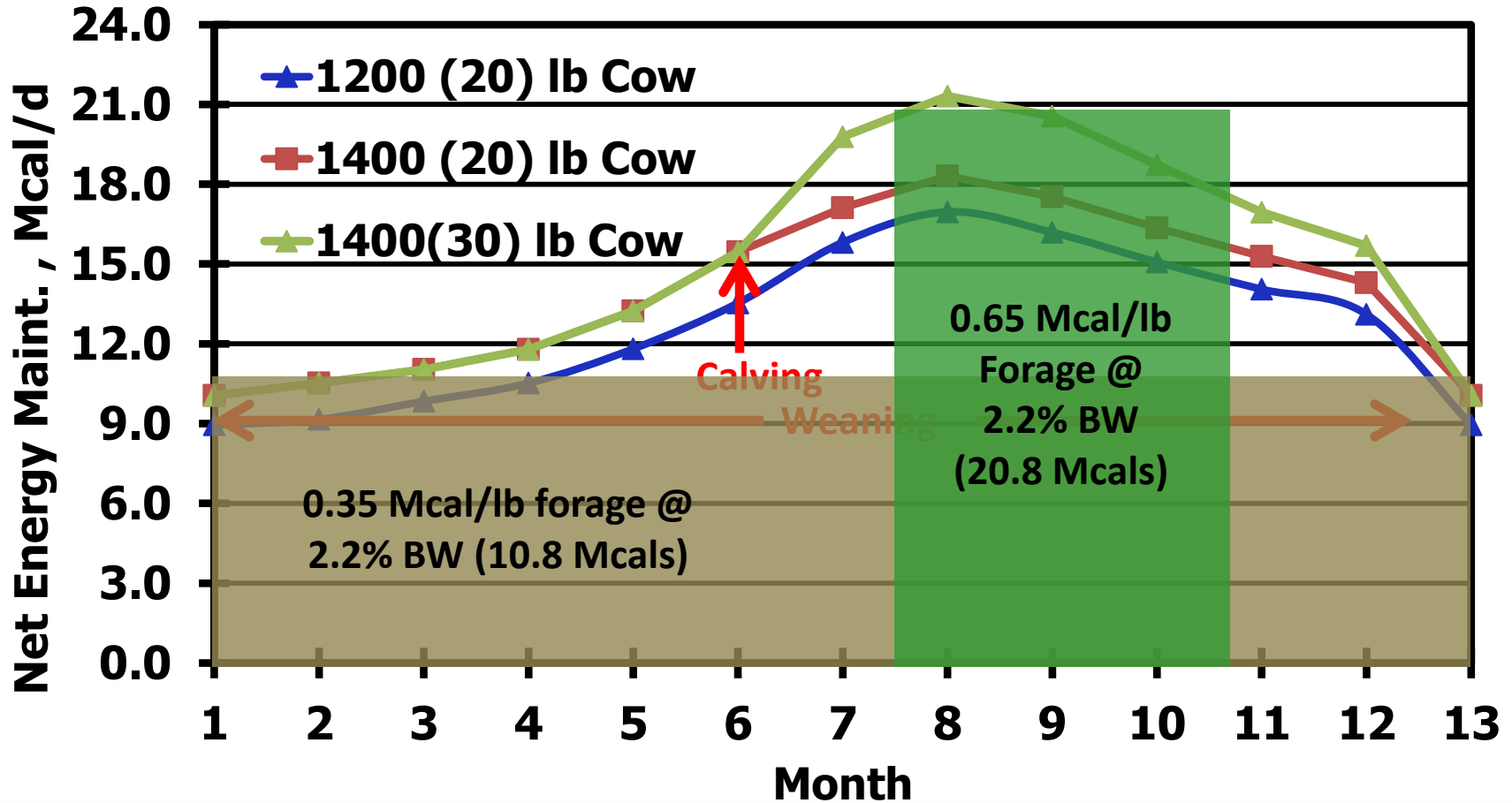
(Dormant Forage, With Protein Supplement)



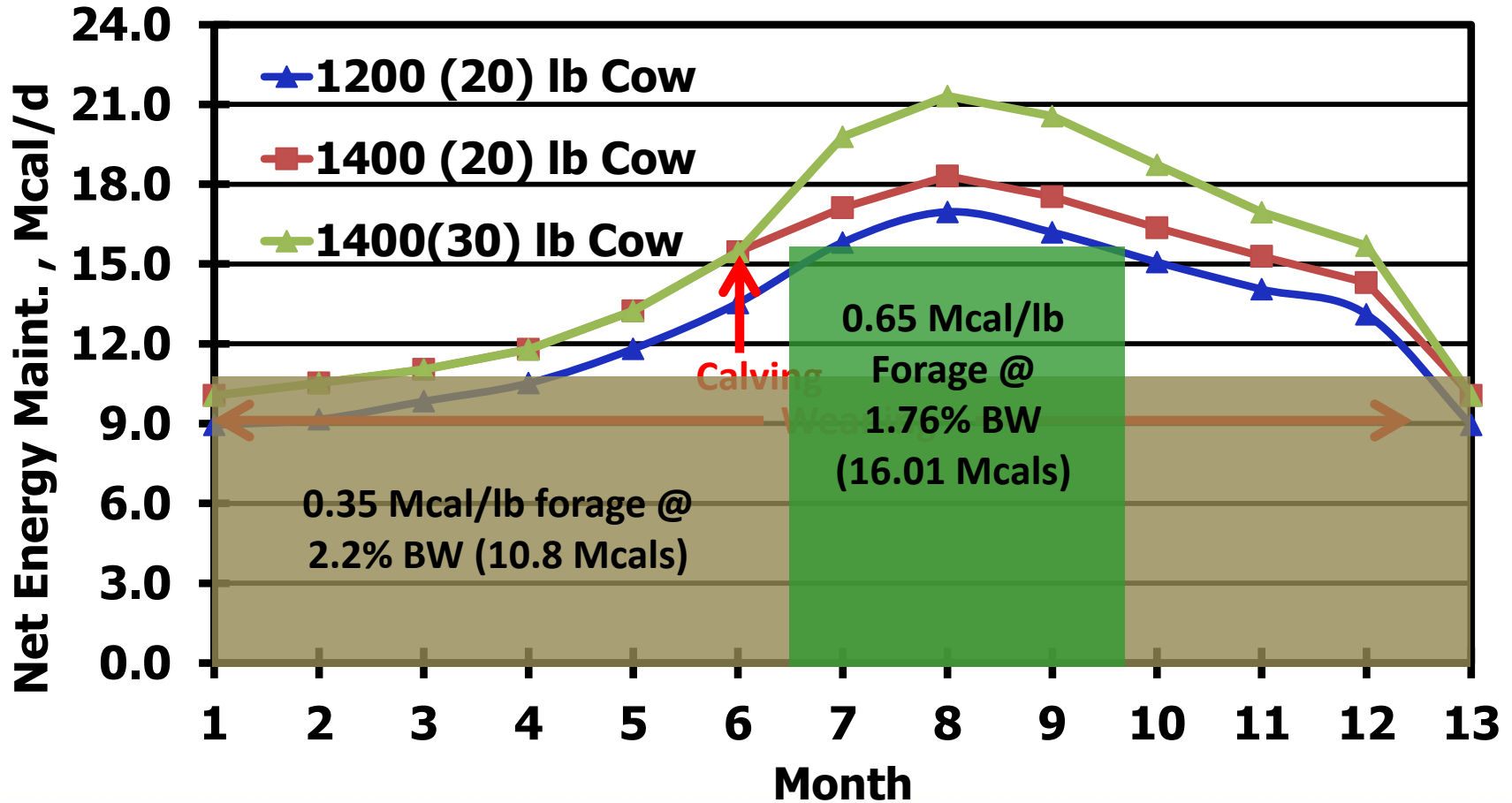
Energy Requirement and Supply (Green Forage)



Energy Requirement and Supply (Earlier Calving)



Energy Requirement and Supply (20% Reduction in Available Forage)

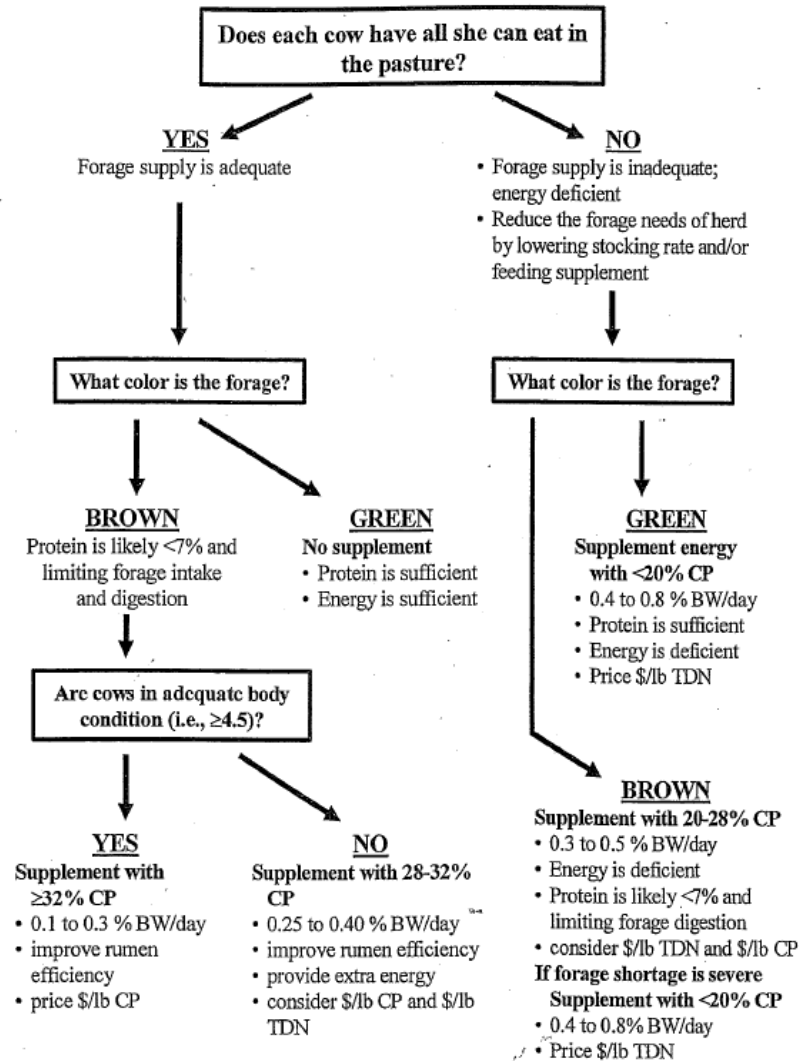


Key Points

- **Higher producing cows**
 - **Nutrient Supply = Nutrients Required**

- **Small reduction in forage availability limits energy (protein?)**
 - **High quality forage but limited supply scenario**
 - **What happens to stocker cattle on short wheat?**

BEEF COW SUPPLEMENT DECISION GUIDE*



**This decision guide is a general tool and is not as accurate as measuring actual forage quality and quantity to develop a strategic supplementation program for a specific class of cattle.*

Thoughts

- **Recognize and “*adjust to fit the situation*”**
 - **Body condition scoring**

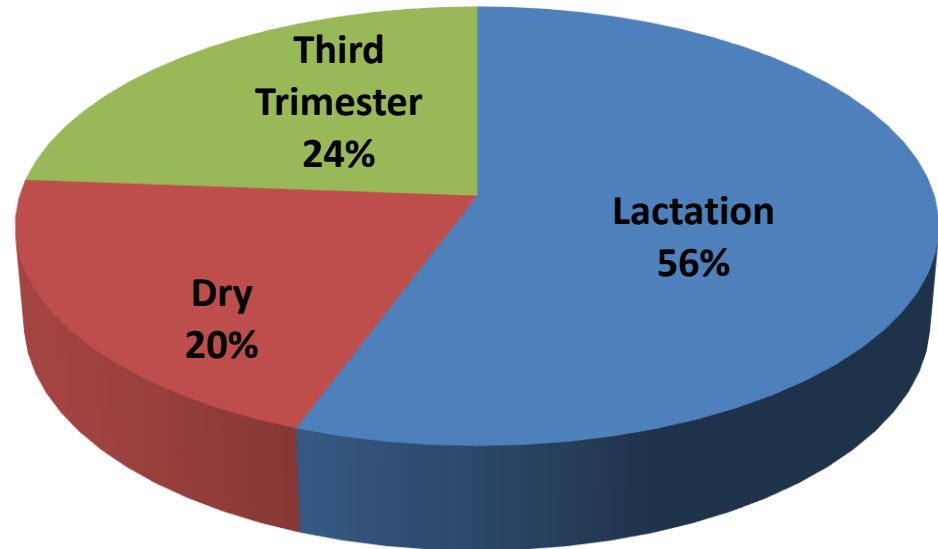
- **Maximize use of forage base !!!**
 - **Can a Cow eat all she wants (Intake)**
 - **Strategic use of forage resources (hay and grazed)**
 - **Supplementation**
 - **Substitution**
 - **Technology = Rumensin**

Can we manage cow requirements? (1400 lb cow, 20 lb milk)

Annual ME requirements, Mcals

Month	Months Since calving	Total ME	Class	calf age
April	1	858.45	Lactation	30
May	2	905.85	Lactation	60
June	3	892.05	Lactation	90
July	4	845.37	Lactation	120
August	5	793.8	Lactation	150
September	6	763.62	Lactation	180
October	7	612	Dry	
November	8	623.7	Dry	
December	9	637.53	Dry	
January	10	667.32	Third Tri	
February	11	712.8	Third Tri	
March	12	786.6	Third Tri	

Total 9099.09

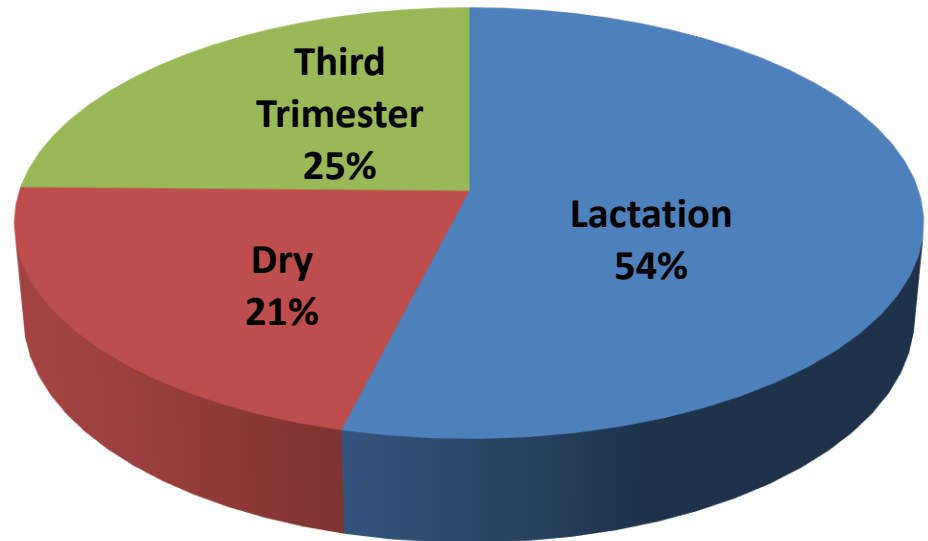


Annual Maintenance Energy (1400 lb cow, 20 lb milk, Early Weaned)

Annual ME requirements, Mcals

Month	Months Since calving	Total ME	Class	calf age
April	1	858.45	Lactation	30
May	2	905.85	Lactation	60
June	3	892.05	Lactation	90
July	4	845.37	Lactation	120
August	5	612	Dry	150
September	6	612	Dry	180
October	7	612	Dry	
November	8	623.7	Dry	
December	9	637.53	Dry	
January	10	667.32	Third Tri	
February	11	712.8	Third Tri	
March	12	786.6	Third Tri	

Total 8765.67



$$\text{Maintenance Energy Savings} = (9099.09) - (8765.67) = 333.42 \text{ Mcals}$$

When Forage Supply is limited...

- Do you turn out the same number of cows for less days?
- Turn out fewer cows to match available forage resources?



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