How to use
Grazing Stick

ADVANCED GRAZING SYSTEMS

Step 1: Measure and Estimate Dry Matter (DM) Available .

- **Measure forage height** (in inches)
- **Determine the forage type** (ex. Mixed Pasture, Orchardgrass & Legumes, etc)
- **Assess forage quality:**

Fair = 60-70% green forage
Good = 70-90% green forage
Excellent = >90% green forage

- Use the grazing stick table to find the **Dry matter in pounds/ acre-inch** for your forage type and condition then multiply by forage height to determine **DM in lbs/acre/inch**



Step 2: Choose your Grazing Utilization Rate

This is the **percentage of forage** you plan to allow animals to consume from the total available forage.
Guidelines to follow:

- **Spring Grazing**: Graze only 1/3 of the total forage mass.
- **Summer/Fall Grazing:** You can graze up to 2/3 of the forage mass.
- **Residual Forage**: Always leave **at least 30%** of the forage going into the dormant season to maintain the vigor of tame forage stands.
- **Support Healthy Regrowth:** Grazing **more than 45% of the top growth** during active growth can stress plants, weaken roots, and slow recovery.

Select a utilization rate that balances **animal needs** and **pasture sustainability.**

CFGA Canadian Forage & Grassland Association
Association Canadienne pour les Plantes Fourragères

Agriculture and Agri-Food Canada
Agriculture et Agroalimentaire Canada

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Step 3: Know Your Animal Weights

- Use the **average weight** of your animals.

(For cow-calf pairs, add cow + calf weight)

Step 4: Forage DM Intake Rate

- Use the table to determine the Forage DM Intake rate of the class of livestock you are grazing

Demo Video Here!

Putting it All Together: Animal Number formula:

Step A: Calculate Total Usable Forage

DM in lbs/acre/inch **(**from Step 1)
X Forage Height (inches) X Acres
X Grazing Utilization % (from Step 2)

Step B: **Calculate Forage Demand**

Animal weight (lbs) (from Step 3)
X DM Intake Rate (%) (from Step 4)
X Grazing Days

Step C: Calculate Number of Animals Supported

Number of Animals =
Total Usable Forage / Forage Demand

Example Calculation
Pasture Size: 100 acres
Forage Height: 10 inches
Forage Type: Good mixed pasture
Estimated DM from stick: 300 lbs/acre-inch
Utilization: 45%
Grazing Days: 15
Animal Type: Cow/calf pairs
Cow = 1500 lbs
Calf = 200 lbs
Total weight = 1700 lbs
Intake Rate: 4% (0.04)
Step A:
300 lbs x 10 inches x 100 acres × 0.45 = **135,000 lbs usable forage**
Step B:
1700 lbs × 0.04 × 15 days = **1,020 lbs forage per pair**
Step C:
135, 000 ÷ 1,020 = **132 cow/calf pairs**
We can graze 132 pair on the 100 acres for 15 days

Putting it All Together: Length of Grazing Days formula:

Step A: Calculate Total Usable Forage

DM in lbs/acre/inch (from Step 1)
X Forage Height (inches) X Acres
X Grazing Utilization % (from Step 2)

Step B: Calculate Forage Demand

Animal weight (lbs) (from Step 3)
X DM Intake Rate (%) (from Step 4)
X Animal Number

Step C: Calculate Length of Grazing Period (Days)

Length of Grazing Period (Days) =
Total Usable Forage / Forage Demand

Example Calculation
Pasture Size: 100 acres
Forage Height: 10 inches
Forage Type: Good mixed pasture
Estimated DM from stick: 300 lbs/acre-inch
Utilization: 45%
Number of Animals: 132 pair
Animal Type: Cow/calf pairs
Cow = 1500 lbs
Calf = 200 lbs
Total weight = 1700 lbs
Intake Rate: 4% (0.04)
Step A:
300 lbs × 10 inches x 100 acres × 0.45 = **135,000 lbs usable forage**
Step B:
1700 lbs × 0.04 × 132 pair = **8,976 lbs forage per pair**
Step C:
135,000 ÷ 8,976 = **15 days**
We can graze 132 pair on the 100 acres for 15 days

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