**Guidelines for Setting “Proper” Stocking Rate**

Four Grazing Mgmt Factors:

* Number of Animals (How Many?)
* Type of Animal (What?)
* Time of Grazing (When?)
* Duration or Length of Grazing (How Long?)

Carrying Capacity =

Stocking Rate =

Forage Demand of Animal

* Ruminants **-** Eat 2.5% of body weight/day in dry matter of forage.
	+ Cattle, sheep, goats
	+ Deer, elk, bighorn sheep, moose, etc.
* Hind-Gut Fermentors -Eat 3.0% of body weight/day in dry matter of forage.
	+ Horses
	+ Rabbits and rodents

Animal Unit Month (AUM) =

Proper Stocking Rate? from Rangeland Health Standpoint

* Proper stocking based on maintaining sufficient plant residue for:
	+
	+ 
	+
	+
* Set stocking rate below carrying capacity
	+
	+
	+
	+
* Heavy use ≠ Overgrazing
* **Overgrazing** = repeated heavy grazing such that damage to the plant community occurs
* **Overstocking** = heavy grazing during a specific season such that high levels of utilization are observable.
* For Rangeland Health: Set Stocking Rates Below Carrying Capacity
	+
	+
	+

Proper stocking rate? From Livestock Production Standpoint



For Livestock Production: Set Stocking Rates At or Below Carrying Capacity

**How do you set stocking rate?
 Balance supply with demand** - 4-step or Forage Demand Method

* Calculate usable forage
* Adjust for terrain, water, or other constraints
* Calculate forage demand of animals
* Calculate stocking rate

**The forage demand method is used:**

* When you have no stocking information from previous years
* To estimate carrying capacity in biological surveys or land appraisal
* When considering changes in kind or class of animals

**Flexible vs Constant stocking:**

* Establish stocking rate based on:
* Past experience
* Current situation
* Long-range weather forecast
* Financial goals
* Etc.
* Set a Stocking Rate and Then Monitor!

 With this method stocking rate is determined by trial and error over years and then monitored by:

* **Range Trend** = changes in plant composition or rangeland health over time
* Grazing Principles
* Which animal -**Animal Species & Class**
* How may animals -**Stocking Rate**
* When to grazing or not graze **-Grazing System**