

# Did you think about your pasture before buying your land?

I bought a farm in Florida with five acres and want to have livestock. What should I do?

- How many animals can I have on the farm?
- I want to have three horses, two cows, and chickens.
  - Animal Units in Florida
- Am I allowed to use all five acres?
- How is the area?
- Where will I place my animals?
  - Rotational vs. Continuous Grazing (Caitlin)
  - Paddocks





How much food do my animals need?

A <u>horse</u> weighing 1,000 lbs. would require 1.5–2.5% of its bodyweight

- 15–25 lbs. of dry matter per day,
- 50–100 lbs. of fresh feed per day

M. Wallau, E. L. Johnson, J. Vendramini, C. Wickens, and C. Bainum, 2019





### How much food do my animals need?

### A beef cow weighing 1,000 lbs. would require 1.8–2.7% of its bodyweight

- Calving Period
  - Peak Milk
    - DMI: 21-23 lb/d (10 lbs), 21-25 lb/d (30 lbs), 21-28 lb/d (30 lbs)
    - Fresh Pasture: 70-92 lb/d (10 lbs), 70-100 lb/d (30 lbs), 70-112 lb/d (30 lbs)

## A <u>beef cow</u> weighing 1,000 lbs. would require 2.1–2.3% of its bodyweight

- Average Daily Gain
  - 21 DMI (1 lb/d) (70 lb/daily fresh pasture)
  - 22 DMI (2 lb/d)
  - 23 DMI (3 lb/d) (92 lb/daily fresh pasture)







## **Choosing the Right Forage Species and Cultivar**

#### Warm-season

### Perennial grasses

 (Bahiagrass, Bermuda, Stargrass, Limpograss, Digitgrass, Rhodegrass, Elephantgrass)

#### Annual Grasses

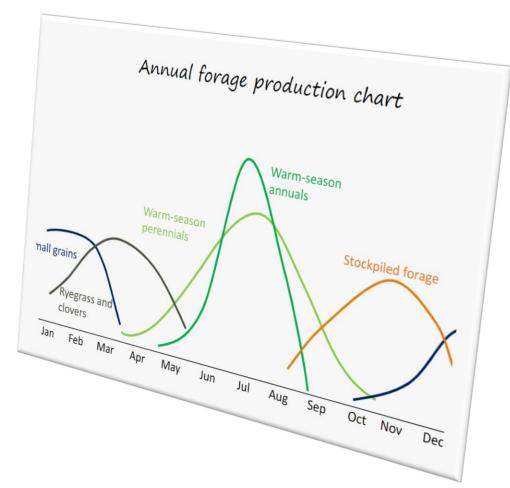
(Pearl Millet, \*\*Sorghum)

### Perennial legumes

(Rhizoma Peanut, FL Carpon Desmodium)

### Annual Season Legumes

(Aeschynomene, Alyceclover)

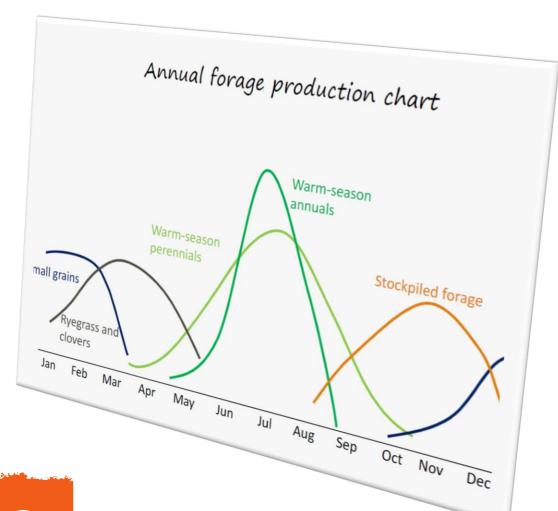




## **Choosing the Right Forage Species and Cultivar**

### **Cool-Season**

- Grasses
  - Ryegrass
- Small Grains
  - (Oats wheat, Triticale)
- Legumes
  - Alfalfa
  - Clovers
  - Vetch





| Forage species       | J | F | M | A | M | J | J | A | S | 0 | N | D | Productivity* (Ib DM/acre) |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|----------------------------|
| Limpograss           |   |   |   |   |   |   |   |   |   |   |   |   | 9000-12000                 |
| Pensacola Bahiagrass |   |   |   |   |   |   |   |   |   |   |   |   | 3000-10000                 |
| Argentine Bahiagrass |   |   |   |   |   |   |   |   |   |   |   |   | 5000-14000                 |
| Hybrid Bermudagrass  |   |   |   |   |   |   |   |   |   |   |   |   | 7000-14000                 |
| Pearl Millet         |   |   |   |   |   |   |   |   |   |   |   |   | 5000-10000                 |
| Rye                  |   |   |   |   |   |   |   |   |   |   |   |   | 2000-5000                  |
| Oat                  |   |   |   |   |   |   |   |   |   |   |   |   | 2000-5000                  |
| Annual Ryegrass      |   |   |   |   |   |   |   |   |   |   |   |   | 2000-5000                  |
| Alfalfa              |   |   |   |   |   |   |   |   |   |   |   |   | 5000-8000                  |
| Arrowleaf clover     |   |   |   |   |   |   |   |   |   |   |   |   | 2000-4000                  |
| Crimson Clover       |   |   |   |   |   |   |   |   |   |   |   |   | 2000-4000                  |
| White clover         |   |   |   |   |   |   |   |   |   |   |   |   | 2000-4000                  |

<sup>\*</sup>estimate range or total productivity, in lb of Dry Matter/acre; actual values depend on cultivar, environment and management; consider using 50% for perennials and 60% for annuals



| Season            | Forage crops planted from se | eed <sup>a</sup> Planting dates | Seeding rates (lb/A broadcast) | ) Planting depths (inches) |  |
|-------------------|------------------------------|---------------------------------|--------------------------------|----------------------------|--|
| Fall <sup>b</sup> | Alfalfa                      | Oct 1-Dec 15                    | 15-20                          | 1/4-1/2                    |  |
|                   | Clover                       |                                 |                                |                            |  |
|                   | Arrowleaf                    | Oct 1-Dec 15                    | 8-12                           | 1/4-1/2                    |  |
|                   | Berseem                      | Oct 1-Dec 15                    | 15-20                          | 1/4-1/2                    |  |
|                   | Crimson                      | Oct 1-Dec 15                    | 20-25                          | 1/4-1/2                    |  |
|                   | Red                          | Oct 1-Dec 15                    | 10–15                          | 1/4-1/2                    |  |
|                   | Rose                         | Oct 1-Dec 15                    | 15-20                          | 1/4-1/2                    |  |
|                   | Subterranean                 | Oct 1-Dec 15                    | 12-22                          | 1/4-1/2                    |  |
|                   | Sweetclover                  | Oct 1-Dec 15                    | 12-15                          | 1/4-1/2                    |  |
|                   | White                        | Oct 1-Dec 15                    | 3–4                            | 0-1/4                      |  |
|                   | Oat-forage                   | Sep 1-Dec 15                    | 100-120 (3-4 bu)               | 1-2                        |  |
|                   | Pea                          |                                 |                                |                            |  |
|                   | Austrian winter              | Oct 1-Dec 15                    | 40-60                          | 1/2-1                      |  |
|                   | Rough/singletary/cale        | ey Oct 1–Dec 15                 | 30–40                          | 1/2-1                      |  |
|                   | Rye-forage                   | Oct 1-Dec 15                    | 90-120 (1.5-2.0 bu)            | 1-2                        |  |
|                   | Ryegrass, Italian (annual)   | Oct 1-Dec 15                    | 20-30                          | 0-1/2                      |  |
|                   | Triticale-forage             | Oct 1-Dec 15                    | 84-112 (1.5-2.0 bu)            | 1-2                        |  |
|                   | Turnips                      | Oct 1-Dec 15                    | 5-6                            | 1/4-1/2                    |  |
|                   | Vetch, hairy                 | Oct 1-Dec 15                    | 30-35                          | 1-2                        |  |
|                   | Wheat-forage                 | Oct 1-Dec 15                    | 100-120 (1.5-2.0 bu)           | 1-2                        |  |



| Spring & Summer | Alyceclover             | Apr 15–June 30 | 15                    | 1/4-1/2 |
|-----------------|-------------------------|----------------|-----------------------|---------|
|                 | Aeschynomene            | Mar 30–June 30 | 6-8 (dehulled)        | 1/4-1/2 |
|                 | Bahiagrass <sup>c</sup> | Feb 15-Aug 15  | 25-30                 | 1/4-1/2 |
|                 | Bermudagrass            | Feb 15-Aug 15  | 10-15                 | 1/4-1/2 |
|                 | Corn                    |                |                       |         |
|                 | Temperate               | Feb 15-Apr 15  | See note <sup>d</sup> |         |
|                 | Tropical                | Apr 15-June 15 | 100-120 (60-90)°      |         |
|                 | Cowpea                  | Apr 1–July 31  | 35-60                 | 1-3     |
|                 | Desmodium, carpon       | Feb 15–June 30 | 6–10                  | 1/4-1/2 |
|                 | Indigo, hairy           | Apr 1–June 30  | 6–10                  | 1/4-1/2 |
|                 | Phasey bean             | Mar 30–June 30 | 10-15                 | 1/4-1/2 |
|                 | Vigna parkerii          | Feb 15–June 30 | 2-5                   | 1/4-1/2 |
|                 | Millet                  |                |                       |         |
|                 | Brown top               | Feb 15-Aug 15  | 15-20                 | 1/2-1   |
|                 | Japanese                | Feb 15-Aug 15  | 24-30                 | 1/2−1   |
|                 | Pearl                   | Mar 15–June 30 | 12-15                 | 1/2-1   |
|                 | Sorghum                 |                |                       |         |
|                 | Sorghum, forage         | Apr 1–June 30  | 30-40 (25)°           | 1-2     |
|                 | Sorghum x sudan         | Mar 15–June 30 | 10-12                 | 1-2     |
|                 | Brachiaria, Mulato      | Mar 15-Aug 15  | 5-10                  | 1/4-1/2 |



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|                   | Sweetclover                    | Oct 1-Dec 15   | 12-15                          | 1/4-1/2                  |  |
|                   | White                          | Oct 1-Dec 15   | 3–4                            | 0-1/4                    |  |
|                   | Oat-forage                     | Sep 1-Dec 15   | 100-120 (3-4 bu)               | 1-2                      |  |
|                   | Pea                            |                |                                |                          |  |
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|                   | Rough/singletary/caley         | Oct 1-Dec 15   | 30-40                          | 1/2−1                    |  |
|                   | Rye-forage                     | Oct 1-Dec 15   | 90-120 (1.5-2.0 bu)            | 1–2                      |  |
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### **Food For Thought:**

- Always check seed quality.
- Seed germination should be 80% or higher for best results.
- Learn how to calculate the number of pounds needed per acre.

**Pounds per Acres Seed Germination %** = **Number of pounds of seeds needed per acre** 

# Soil Preparation: 1. Soil Test





## Soil Preparation: 2. Soil Prep



## **Soil Preparation (Video)**





# Soil Preparation: 3. Pre-emergent





## Soil Preparation: 4. Plant the Seeds











# Soil Preparation: 5. Apply Fertilizer After Germination











### References

- Matt Hersom and Todd Thrift. 2017. Nutritional Management of Bulls. <a href="https://edis.ifas.ufl.edu/pdffiles/AN/AN21100.pdf">https://edis.ifas.ufl.edu/pdffiles/AN/AN21100.pdf</a>
- M. O. Wallau, J. Vendramini, and Y.C. Newman. 2018. Forage Planting and Establishment
  Methods on Prepared Seedbed.
- Yoana Newman. 2002. Florida Forage Handbook: Table of Contents. <a href="http://edis.ifas.ufl.edu/pdffiles/AG/AG17000.pdf">http://edis.ifas.ufl.edu/pdffiles/AG/AG17000.pdf</a>



### **Pasture Establishment Practices**



