# Bahiagrass Establishment: The How-To & Costs

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# Where to Start & Why

- Prepared Seedbed
  - Eliminate competition from weeds
  - pH needs to be 5.5 for Bahiagrass
  - A clean, firm seedbed allows for a better chance of seed germination.

## **Prepared Seedbed: Clearing**

# Clear weeds, stumps, and brush

- 64 oz/acre (.5 gal) of glyphosate for native species & general weeds
- 128 oz/acre (1 gal) of glyphosate for Bahiagrass & common Bermuda

### **Equipment**

- 40 to100-gallon electric sprayer w/ 3-6 ft. boom
  - Mounted to ATV, UTV, or pulled behind tractor
- · Repeated disking/tilling
  - Could be a cheaper option, but must make sure the seedbed is packed firm before planting

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# **Prepared Seedbed: Planning**

### **Soil Test**

- pH 5.5
- Lime if needed & apply 3-6 months before planting
- Fertilize if needed based on soil test results
  - Only P and K; N may encourage other grass/weed growth

### **Planting Dates**

- March August
  - Will vary based on location & weather
- Rainy season (June August)
- With irrigation
  - as early as March

### **Planting**

#### Seed

- Cultivars → select one that fits your needs & location
- Ideal Seed → 80% germination, no noxious weeds
- Order/Buy close to planting to avoid risks involved with storage
- Rate: 20-30 lbs/acre
  - May increase if broadcasting

### **Equipment**

- Soil must be packed before planting to ensure accurate seed depth for germination
- Cultipacker-style planter (drop seeder)
- Grain drill (small seed-box attachment)
- Broadcast
- Depth 1/4 1/2 inch deep

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# **After Planting: Fertilizer**

- Bahiagrass needs root establishment before fertilizing, unlike some annual grasses that can be fertilized at planting or right after emergence
- **7-10 days after emergence** → 30 lbs of N/acre, all recommended P, & 50% of recommended K
- **40-50 days later** → 50 lbs of N/acre & remaining K
- After establishment → follow soil test results

## **After Planting: Weed Control**

#### Herbicides

- 2,4-D, Dicamba, Glyphosate, GrazonNext, Sulfosulfron
- Depends on what you are treating for & season (dormant v. nondormant)
- DO NOT use herbicides on Bahiagrass until at least 6 in tall

#### **Helpful Resources**

https://edis.ifas.ufl.edu/publication/AG342 – Bahiagrass (Paspalum Notatum Flugge): Overview and Pasture Management https://edis.ifas.ufl.edu/publication/ag107 - Forage Planting and Establishment Methods on Prepared Seedbed https://edis.ifas.ufl.edu/publication/wg006 - Weed Management in Pastures and Rangeland-2023

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## **How Much is This Going to Cost?**

### **Operating Costs (Variable)**

- Preparation
- Planting
- Fertilizer & Weed Control
- Labor & Interest



### **Ownership Costs (Fixed)**

- Equipment (depreciation, interest, taxes)
- Land
- Overhead (any other recurring expenses that are not directly involved in production)

❖ Fixed Costs are very specific to each operation

| Costs | Per Acre: | <b>Preparation</b> |
|-------|-----------|--------------------|
|       |           |                    |

|                        | Unit    | Quantity | \$/Unit     | Total/Acre  |
|------------------------|---------|----------|-------------|-------------|
| Disking (fuel costs)   | passes  | 2        | \$<br>3.02  | \$<br>6.04  |
| Herbicide (glyphosate) | gallons | 0.5      | \$<br>22.00 | \$<br>11.00 |
| Soil Test              | test    | 1        | \$<br>10.00 | \$<br>10.00 |
| Lime (1 ton/acre)      | ton     | 1        | \$<br>52.00 | \$<br>52.00 |
| TOTAL                  |         |          |             | \$ 79.04    |
|                        |         |          |             |             |

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# **Costs Per Acre: Planting**

|                                      | Unit   | Quantity | \$/Unit    | Total/Acre   |
|--------------------------------------|--------|----------|------------|--------------|
| Seed                                 | pounds | 25       | \$<br>6.00 | \$<br>150.00 |
| Cultipacking <sub>(fuel costs)</sub> | passes | 2        | \$<br>2.70 | \$<br>5.40   |
| Planter <sub>(fuel costs)</sub>      | passes | 1        | \$<br>1.62 | \$<br>1.62   |
| TOTAL                                |        |          |            | \$ 157.02    |

| Costs Per Acre: Fertilizer & Weed Control |         |          |    |         |    |            |
|---|---------|----------|----|---------|----|------------|
| 7-10 days after emergence                 | Unit    | Quantity |    | \$/Unit |    | Total/Acre |
| Nitrogen (N)                              | pounds  | 30       | \$ | 0.62    | \$ | 18.60      |
| Phosphorus (p2o5)                         | pounds  | 40       | \$ | 0.84    | \$ | 33.60      |
| Potassium (K2O)                           | pounds  | 30       | \$ | 0.42    | \$ | 12.60      |
| 40-50 days after<br>emergence             |         |          |    |         |    |            |
| Nitrogen (N)                              | pounds  | 50       | \$ | 0.62    | \$ | 31.00      |
| Potassium (K2O)                           | pounds  | 30       | \$ | 0.42    | \$ | 12.60      |
| After 6 in of growth                      |         |          |    |         |    |            |
| Herbicide (2,4-D)                         | gallons | 0.25     | \$ | 18.00   | \$ | 4.50       |
| TOTAL                                     |         |          |    |         | \$ | 112.90     |

| Costs Pe   | Costs Per Acre: Labor, Fuel, & Interest |          |    |         |    |          |  |
|--|---|----------|----|---------|----|----------|--|
|  | Unit                                    | Quantity | ;  | \$/Unit | To | tal/Acre |  |
| Labor  | hours                                   | 2        | \$ | 13.00   | \$ | 26.00    |  |
| Fuel<br>(spraying x2 &<br>fertilizing/liming x3) | gallons                                 | 2.06     | \$ | 4.00    | \$ | 8.23     |  |
| Interest   | dollars                                 | \$383.20 | į. | 5.13%   | \$ | 19.64    |  |
| TOTAL  |   |          |    |         | \$ | 53.87    |  |

| Costs Per Acre: TO           | TAL        |
|------------------------------|------------|
|                              | Total/Acre |
| Preparation                  | \$ 79.04   |
| Planting                     | \$ 157.02  |
| Fertilizer & Weed Control    | \$ 112.90  |
| Labor, Fuel, & Interest      | \$ 53.87   |
| TOTAL (operating costs/acre) | \$ 402.83  |

