

# Budgets for Pasture Establishment: Seeded and Vegetative<sup>1</sup>

Les Harrison, Jonael Bosques, and Yoana Newman<sup>2</sup>

Many factors should be considered before establishing or renovating a pasture. Producers must invest their time and financial resources wisely to remain economically viable in today's competitive environment and achieve the best possible results for a sound, lasting pasture.

Budgets can be used to make rational decisions when establishing or renovating a pasture in Florida. This document is a guide for evaluating the costs of establishing a seeded-type pasture (such as bahiagrass or seeded bermudagrass) versus vegetatively propagated hybrid bermudagrasses (such as Tifton 85, Jiggs, or Tifton 44). For production, adaptation, and quality comparisons, refer to the Forages of Florida website, where a description of the different grasses is provided (<http://agronomy.ifas.ufl.edu/ForagesofFlorida/index.php>).

This budget is a starting point for the development of a cost versus benefits analysis. The development of a budget should lead to an economic conclusion and a business choice as it relates to an individual farming enterprise. After due diligence, the producer may decide to pursue pasture establishment or renovation if the anticipated returns clearly outweigh the forecast expenditures. Conversely, if the analysis indicates it is not efficient to proceed, then alternatives should be considered. These may include pasture rental and/or purchasing the appropriate livestock forage.

## The Cost Presented throughout This Publication

The input costs provided are comprised of static, statewide composite figures and are likely to be different from those encountered in individual market areas, which are influenced by a variety of factors. These factors may include time of year, location within Florida, farm supply businesses (which are competing for sales), market dynamics (which can raise or lower cost by changing demand or supply), weather events, modification of the regulatory environment, or some combination of the aforementioned. The prices in the following tables were representative data in April 2014.

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2. Les Harrison, UF/IFAS Extension Wakulla County; Jonael Bosques, UF/IFAS Extension Marion County; and Yoana Newman, Agronomy Department; UF/IFAS Extension, Gainesville, FL 32611.

**Table 1. Establishment Costs per Acre (Bahigrass)—2014†**

Concept	Unit	Quantity	Unit Price (\$)	Total (\$)
<b>A. Operating Costs</b>				
<b>Soil Preparation</b>				
Plowing	Passes	1.00	2.60	2.60
Disking	Passes	2.00	3.30	6.60
<b>Planting and Fertilization‡</b>				
Seed (early spring–middle August)	Lbs	20.00	2.70	54.00
Planter	Passes	1.00	1.76	1.76
Cultipacking	Passes	1.00	1.53	1.53
Nitrogen (7–10 days AP)	Lbs	30.00	0.40	12.00
Nitrogen (30 days AP)	Lbs	50.00	0.40	20.00
P <sub>2</sub> O <sub>5</sub> (low-soil test) (7–10 days AP)	Lbs	40.00	0.33	13.20
K <sub>2</sub> O (low-soil test) (7–10 days AP)	Lbs	40.00	0.23	9.20
K <sub>2</sub> O (low-soil test) (30 days AP)	Lbs	40.00	0.23	9.20
Micronutrients*	Lbs	6.15	7.50	46.12
Lime (1 ton/acre)	Ton	1.00	28.00	28.00
<b>Weed Control</b>				
Mowing (planting to 6 in)**	Passes	2.00	2.20	4.40
Herbicide after 6 in (forage plant height)	Gallons	0.25	7.00	1.75
Labor	Hours	2.00	9.79	19.58
Interest (operating cost)	\$	191.48	0.09	18.92
<b>Total Operating Costs</b>				<b>248.86</b>
<b>B. Ownership Costs</b>				
Tractor & Machinery (depreciation, insurance, taxes)	Acre	1.00	26.38	26.38
Land charge	Acre	1	***19.50	19.50
Miscellaneous Overhead (10% of total operating costs)	\$	229.071	10.00%	22.91
<b>Total Ownership Costs</b>				<b>68.79</b>
<b>C. Total Costs (A + B) (Bahigrass Establishment per Acre)</b>				<b>317.65</b>

† This budget is for planning purposes only.

‡ Fertilization and liming should be based on a soil test. If P and K are in medium range, recommendations will be different.

\* Includes 1.5 lb each of elemental Zn, Mn, Cu, & Fe from a sulfate source; 0.15 lb B & 5 lb S per acre.

\*\* Two times, to control weeds. Weeds are mowed at 6"–8" height back to 2" height.

\*\*\* Unimproved pasture average, Florida land value survey (<http://edis.ifas.ufl.edu/fe833>)

**Table 2. Establishment Cost per Acre (Tifton 85 Bermudagrass)—2014<sup>†</sup>**

Concept	Unit	Quantity	Unit Price (\$)	Total (\$)
<b>A. Operating Costs</b>				
<b>Soil Preparation</b>				
Plowing	Passes	1.00	2.60	2.60
Disking	Passes	2.00	3.30	6.60
<b>Planting and Fertilization<sup>‡</sup></b>				
Sprigging (incl. seeding material, 30 bu/acre)	Acres	1.00	160.00	160.00
Nitrogen (7–10 days AP)	Lbs	30.00	0.40	12.00
Nitrogen (30 days AP)	Lbs	50.00	0.40	20.00
P <sub>2</sub> O <sub>5</sub> (low-soil test) (7–10 days AP)	Lbs	40.00	0.33	13.20
K <sub>2</sub> O (low-soil test) (7–10 days AP)	Lbs	40.00	0.23	9.20
K <sub>2</sub> O (low-soil test) (30 days AP)	Lbs	40.00	0.23	9.20
Micronutrients*	Lbs	6.15	7.50	46.12
Lime (1 ton per acre)	Tons	1.00	28.00	28.00
<b>Weed Control**</b>				
Herbicide 7 days after sprigging	Gallons	0.25	30.00	7.50
Labor	Hours	2.00	9.79	19.58
Interest (operating cost)	\$	378.82	0.09	34.09
<b>Total Operating Costs</b>				<b>368.09</b>
<b>B. Ownership Costs</b>				
Tractor-Machinery	Acre	1.00	32.50	32.50
(depreciation, insurance, taxes)	Acre	1	***19.50	19.50
Land charge				
Misc. Overhead (10% of total operating costs)	\$	413.99	10.00%	41.40
<b>Total Ownership Costs</b>				<b>93.40</b>
<b>C. Total Costs (A + B) (T-85 Bermudagrass Establishment per Acre)</b>				<b>461.49</b>

<sup>†</sup> This budget is for planning purposes only.

<sup>‡</sup> Fertilization and liming should be based on a soil test. If P and K are in medium range, recommendations will be different.

\* Includes 1.5 lb each of elemental Zn, Mn, Cu, & Fe from a sulfate source, 0.15 lb B & 5 lb S per acre.

\*\* Herbicide is 2,4 D plus dicamba at a rate of 2 pt/acre.

\*\*\* Unimproved pasture average, Florida land value survey (<http://edis.ifas.ufl.edu/fe833>).