

Table 1. Rate and cost of items for establishment of GINP and GMNP at MSU Prairie Research Unit in Prairie, MS, USA.

Item	Function	Rate (ha ⁻¹)	Cost ^a (\$ ha ⁻¹)
Imazapyr	Pre-plant bermudagrass eradication	3.51 L	139.84
Glyphosate	Pre-plant tall fescue eradication	9.37 L	82.61
Imazapic + Glyphosate	At-plant herbicide	1.61 L	46.58
Glyphosate	At-plant herbicide	2.34 L	20.66
Spray	Herbicide application	3	77.47
Fire lane	Prescribed fire	43.24 m	4.08
Fire	Prescribed fire	1	51.64
Seed and no-till planting	GMNP establishment	13.45 kg PLS	349.98
Seed and no-till planting	GINP establishment	8.97 kg PLS	268.23
Pastureland rent	Opportunity cost	2 years	86.01

^aCosts were converted to 2011 prices, accounting for inflation.

Table 2. Mean (SE) number of eggs per nest and number of fledglings per successful nest by treatment^a for Dickcissels at the Mississippi State University Prairie Research Unit in Monroe Co., MS, USA, 2011–2012.

Parameter	GMEP	GINP	GMNP
	Mean (SE)	Mean (SE)	Mean (SE)
Eggs nest ⁻¹	4.35 (0.14)	4.56 (0.16)	4.5 (0.12)
Fledglings nest ⁻¹	3.00 (0.97)	3.00 (0.55)	3.22 (0.28)

^aTreatments: GMEP = grazed mixed exotic pasture; GINP = grazed Indian grass native pasture; GMNP = grazed mixed native pasture.

Table 3. Mean average daily gain (kg d^{-1} , and 95% CI) estimated from linear mixed models by year and treatment^a for steer at the MSU Prairie Research Unit in Prairie, MS, USA.

Year	GMEP	GINP	GMNP
2011	0.42 (0.32–0.51)	0.63 (0.54–0.73)	0.61 (0.52–0.70)
2012	0.29 (0.19–0.38)	0.50 (0.40–0.60)	0.48 (0.38–0.57)

^aTreatments include grazed mixed exotic pasture (GMEP), grazed Indian grass pasture (GINP), and grazed mixed native pasture (GMNP).

Table 4. Costs and revenue (\$ ha⁻¹) from partial enterprise budgets used to calculate marginal rate of return for conversion of GMEP to GINP or GMNP at the MSU Prairie Research Unit, MS, USA.

Treatment ^a	2011			2012		
	Total cost	Total revenue	Net revenue	Total cost	Total revenue	Net revenue
GMEP	2043.02	3444.20	1401.18	2663.24	2994.74	331.50
GINP	2176.32	3625.36	1449.04	2776.34	3140.07	363.73
GMNP	2188.98	3607.98	1419.75	2779.83	3109.01	329.18

^aTreatments include grazed mixed exotic pasture (GMEP), grazed Indian grass native pasture (GINP), and grazed mixed native pasture (GMNP).

Table 5. Sensitivity analysis^a of marginal rate of return from conversion of GMEP to GINP and GMNP.

Parameter	Baseline value	20% decrease		20% increase	
		GINP	GMNP	GINP	GMNP
Selling Price	2.93 (\$ kg ⁻¹)	-77.2	-166.1	72.6	184.6
ADG ^b	0.63, 0.61 (kg day ⁻¹)	-75.3	-173.5	73.9	170.0
Seed ^b	164.60, 248.19 (\$ ha ⁻¹)	15.2	45.5	-10.6	-36.8
Prescribed fire	51.64 (\$ ha ⁻¹)	38.2	80.6	-31.8	-53.2
Fertilizer	0.480 (\$ kg ⁻¹)	-10.3	-21.9	10.9	23.1
Interest	5.5%	15.1	39.3	-14.3	-37.1
Establishment ^b	796.13, 880.12 (\$ ha ⁻¹)	71.4	168.4	-51.8	-121.3

^aI conducted sensitivity analysis by varying 2011 partial budget parameters ($\pm 20\%$) and quantifying the percent change in marginal rate of return.

^bBaseline values are reported for GINP and GMNP, respectively.