

(15)

**PASTURE**

**ANNUAL RYEGRASS PROJECTED PRODUCTION COSTS 1987-1988**

Mechanical operations at custom rates. Labor at \$5.50 per hour (\$4.30 plus Social Security, unemployment insurance and fringe benefits).

OPERATION	CUSTOM RATE	MATERIALS		HAND LABOR		COSTS Per Acre
		Type	Cost	Hours	Dollars	
<b>LAND PREPARATION</b>						
Disc 2x	9.00					18.00
Fertilize	8.50	100# NH3	14.50			23.00
Border	8.50					8.50
Float 2x	7.75					15.50
<b>TOTAL LAND PREPARATION</b>						<b>65.00</b>
<b>GROWING PERIOD</b>						
Plant	8.50	40# seed @ .20/lb	8.00			16.50
Irrigate 1lx		3.5 ac/ft	31.50	4	22.00	53.50
Fertilize		250# NH3	36.25			36.25
<b>TOTAL GROWING PERIOD</b>						<b>106.25</b>
<b>GROWING PERIOD &amp; LAND PREPARATION COSTS</b>						<b>171.25</b>
Land Rent (gross)						100.00
Cash Overhead--	10% of growing, land preparation & land rent					27.13
<b>TOTAL COSTS</b>						<b>298.38</b>

**COST PER CWT OF GAIN**

Calculations below show the cost per cwt. of gain at various stocking rates and rates of gain, assuming a grazing period of 150 days.

	Stocking Rate (steers per acre)							cwt. gain for 150 days
	2	2.5	3	3.5	4	4.5	5	
1.00	99	80	66	57	50	44	40	1.5
1.10	90	72	60	52	45	40	36	1.65
1.20	83	66	55	47	41	37	33	1.8
1.30	77	61	51	44	38	34	31	1.95
Average daily gain	1.40	71	57	47	41	36	28	2.1
1.50	66	53	44	38	33	29	27	2.25
1.60	62	50	41	36	31	28	25	2.4
1.70	59	47	39	33	29	26	23	2.55
1.80	55	44	37	32	28	25	22	2.7
1.90	52	42	35	30	26	23	21	2.85
2.00	50	40	33	28	25	22	20	3

RYEGRASS PASTURE CULTURE

1987-1988

<u>YEAR</u>	<u>ACRES</u>	<u>VALUE/UNIT<sup>A/</sup></u>
1986	3,200	\$200
1985	3,300	200
1984	6,700	200
1983	2,540	200
1982	2,500	200

A/ Pastured five times

SOIL PREPARATION: A uniform seed bed is a prerequisite to a good stand. High spots in the field causes uneven irrigation, resulting in poor stands.

PLANTING RATES, DATES & VARIETIES: Plant from 20 to 40 pounds of annual ryegrass seed per acre. Heavier rates may be needed on saline soils. Ryegrass may be planted from mid-September through November. Early plantings in September are excellent if weather has cooled down. "Common" is normally a good yielding variety in the Imperial Valley, however, most annual ryegrass varieties can be grown. When in doubt, consult your local farm advisor.

FERTILIZERS: Ryegrass needs approximately 200 pounds of total nitrogen for optimum growth. Fifty to 100 pounds are applied preplant as ammonia, however, nitrogen carryover from previous crops will reduce early season requirements. Fifty pounds of nitrogen, as ammonium nitrate or ammonia, should be applied after pasturing or as needed.

Excess nitrogen can cause nitrate poisoning in livestock, and is most likely in rapidly growing plants. Regular tissue analysis can keep growers aware of nitrate levels.

Phosphate residues from previous crops are generally sufficient for proper ryegrass production.

IRRIGATION: Ryegrass usually thrives under moist soil conditions. Quick applications of irrigation water are sufficient unless leaching of salts is intended. Ryegrass needs about eleven irrigations during the growing period.

PEST CONTROL: Weed control is not normally necessary in ryegrass pasture; 2,4-D gives excellent control of broadleaf plants if weed control measures are needed.

PASTURING: It takes about 75 days under good conditions from planting to pasturing ryegrass.

Ryegrass is normally pastured on a 28 to 40 day cycle. Four fields are pastured on a 7 to 10 day schedule. Stocking rate on the overall acreage will range from 3 to 5 head per actual acre planted.

If only 1/4 of the overall acreage is pastured at one time, the stocking rate for that area would be 4 x 3-5 cattle per acre or 12-20 cattle per acre.

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