San Benito

SAMPLE COSTS FOR IRRIGATED PASTURE ON ROLLING LAND
SPRINKLER IRRIGATION

April 50

Based on a 50 Acre Operation

Yield per acre varies from pasture to pasture, depending upon differences in soil and such operations as irrigation, fertilization and grazing management.

The production of pasture is measured in animal unit months (A.U.M.), the normal growth or production by a mature animal (a mature beef cow or 2 year old steer) for one month. It equals 0.4 tons of hay or 400 pounds of total digestible nutrients.

Irrigation and Pasture Yield Schedule

	Acre inches water	A.U.M.* Per Acre		
		Good	Fair	Poor
Jan.				
Feb.		.2		
Mar.		.6	.5	.4
Apr.		1.4	1.0	.8
May	4.0	1.8	1.7	1.3
June	4.0	2.0	1.7	1.4
July	6.0	2.0	1.7	1.3
Aug.	6.0	1.6	1.5	1.2
Sept.	4.0	1.4	1.2	1.0
Oct.	4.0	1.0	.7	.6
Nov.				
Dec.				
Total	28.0	12.0	10.0	8.0

SAMPLE EXPENSES WITH A YIELD OF 10 ANIMAL UNIT MONTHS

	Quantity	Price	Cost per acre	Cost** per AUM
Irrigation - moving pipe 7 times	7 hr.	1.00	7.00	
Miscel. other labor, mow, fertilize, etc.	3 hr.	1.00	3.00	
Tractor and truck	3	1.50	4.50	
Total labor and field power			14.50	1.45
Power to pump 28 A in. per A 210 head	837 kwh	2¢	16.64	1.66
Miscel. - weed control, fertilizer, repairs			10.00	1.00
Total material cost			26.64	2.66
General expense			2.00	.20
County taxes $100 value at 3.50 rate			3.50	.35
Total cash and labor cost			46.64	4.66

	Original Invest. Total 50 acres	Original Invest. Per acre	Av. invest.	5% int.	Depreciation		
			Dollars per Acre				
Stand - 5 year life	1250	25	12.50	.63	5.00		
Irrigation system	10,000	200	100.00	5.00	14.00		
Fencing	1250	25	12.50	.62	1.25		
Miscel. other	500	10	5.00	.25	.70		
Land	10,000	200	200.00	10.00	--		
Total investment	23,000	460	330.00				
Total depreciation					20.95	20.95	2.10
Sub total - cash and depreciation costs						67.59	6.76
Total interest on investment				16.50		16.50	1.65
Total all costs						84.09	8.41

* Animal unit month equivalents: 1 weaner calf 0.5 animal unit, 1 yearling 0.75 animal unit, one 2 year old 1.0 animal unit or 1 sheep 0.2 animal unit.

** Based on a yield of 10 animal unit months per year.

California Agricultural Extension Service Hollister, April, 1955

IRRIGATED PASTURE IN SAN BENITO COUNTY
ROLLING LAND IRRIGATED BY SPRINKLERS

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Presented herewith are some sample costs for an irrigated pasture enterprise on the more gently rolling lands which can be irrigated by sprinklers. Irrigated pasture is used successfully in San Benito County when operated as a supplementary feed source for an established rangeland beef cattle enterprise. Besides increasing the total feed supply it also serves as an excellent source of Vitamin A.

Requirements:

A fairly large operation is essential in order that overhead may be spread. In this illustration a 50 acre unit was used. Wherever soil conditions permit, the pasture mixture used is predominantly alfalfa. Alfalfa will also give the highest meat production yield in this area.

A well, pumping equipment and sprinkler system sufficient to provide a maximum of six acre inches of water per month is necessary. Six irrigations, May through October, are usually required.

Adequate fencing and cross-fencing to facilitate proper grazing management will be required.

Pasture Management:

In order to gain maximum production from an irrigated pasture which is predominantly alfalfa, the pasture should be cross-fenced sufficiently so that grazing rotation will allow a plant recovery period of from 25 to 30 days.

The spring pasture crop is usually cut for hay because feeder cattle are usually still on the range or are higher priced at that time of year.

Proper stocking is very important. Overstocking can reduce production to a point where the animal is merely maintained at its original starting weight. Understocking will waste forage, with forage plants becoming coarse and less palatable.

A properly stocked pasture should produce approximately 450 pounds of beef per acre per year, plus the first cutting of hay, yielding about one and one-quarter tons.

The bloat hazard, especially during early spring or late summer and fall, may be reduced by providing dry roughage and by filling cattle well before moving to a new field.

Production Costs:

It will be noted from the analysis on the reverse side that the labor and material, including power, amounts to $48.64 per acre; adding interest and depreciation brings the total cost to $86.09.

On a yield basis the operation costs of one mature animal making normal growth is $4.86 per month. With interest and depreciation added the total cost for one mature animal is $8.61 per month. This is equivalent in feed cost to hay at $12.15 per ton and $21.52 per ton respectively.