

SAMPLE COSTS FOR IRRIGATED PASTURE ON GOOD VALLEY LAND
IRRIGATED BY FLOODING

APR 17 55

Based on a 50 Acre Operation

San Benito

Irrigation and Pasture Yield Schedule

	Acre inches water	A.U.M.* Per Acre		
		Good	Fair	Poor
Jan.				
Feb.		.5	.2	
Mar.		.8	.6	.5
Apr.		1.4	1.4	1.0
May	6.0	2.1	1.8	1.7
June	6.0	2.3	2.0	1.7
July	6.0	2.3	2.0	1.7
Aug.	6.0	1.8	1.6	1.5
Sept.	6.0	1.6	1.4	1.2
Oct.	6.0	1.2	1.0	.7
Nov.				
Dec.				
Total	36.0	14.0	12.0	10.0

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 (AUM). The AUM is the quantity of feed needed for 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.

SAMPLE EXPENSES WITH A YIELD OF 12 ANIMAL UNIT MONTHS

	Quantity	Price	Cost per acre	Cost** per AUM	
Labor: irrigation labor - 6 irrig. @ 1 hr. ea.	6	1.00	6.00		
Miscel. other labor, clip, fertilize, etc.	3	1.00	3.00		
Tractor and truck	3	1.50	4.50		
Total labor and field power			13.50	1.12	
Power to pump 36 A. in. 100 ft. head	768 kwh		11.28		
Miscel. - weed control, fertilizers, etc.			6.00		
Total material cost			17.28	1.44	
General expense			1.55	.13	
County taxes. 275 incl. irrig. @ 3.50			9.60	.80	
			41.93	3.49	
Investment overhead based on 50 acres of irrigated pasture but irrigation system for 100 A.	Original Cost Total 50 acres	Per A.	Av. invest.	5% int.	Depreciation
	Dollars per A.				
Stand.	1750	35.00	17.50	.88	7.00
Irrigation system \$8000	4000	80.00	40.00	2.00	4.00
Fencing	1250	25.00	12.50	.62	1.25
Miscel.	500	10.00	5.00	.25	.70
Land	30,000	600.00	600.00	30.00	
Total investment	37,500	750.00	675.00		
Total depreciation					12.95
Sub total cash and depreciation costs					12.95
Total interest on investment				33.75	
Total all costs					88.63
					7.39

* Based on a yield of 12 animal unit months per year.

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

Presented herewith are some sample costs for irrigated pastures on good valley land which might be used in rotation with truck and field crops. Although the returns would normally be less than would be secured from intensive cultivation of row crops, pastures have values in rotation for disease and insect control as well as for building soils. Provisions for irrigation by flooding are usually present on land where row crops have been produced.

Requirements:

A fairly large operation is essential in order that overhead may be spread. In this illustration a 50 acre pasture using an irrigation system serving 100 acres was used. Because these valley soils are usually deep, the pasture mixture used is predominantly alfalfa. Alfalfa will also give the highest meat production yield in this area.

Well and pumping equipment sufficient to provide six acre inches of water per month is necessary, and is similar to the requirements for row crop farming. 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 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 550 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 \$41.93 per acre; adding interest and depreciation brings the total cost to \$88.63.

On a yield basis the operation costs of one mature animal making normal growth is \$3.49 per month. With interest and depreciation added the total cost for one mature animal is \$7.39 per month. This is equivalent in feed cost to hay at \$8.72 per ton and \$18.47 per ton respectively.