

SAMPLE COSTS OF PRODUCING ALFALFA HAY
(Sprinkler Irrigation)
San Benito County, 1973

H. Bill Collins, Farm Advisor

Philip S. Parsons, Ext. Economist

150 acres of alfalfa on a 200 acre farm

Yield -- 7 tons in 5 to 6 cuttings

| Operation | Hrs. Per Acre | Cash and Labor Costs Per Acre | | | | Total |
|--|---------------|-------------------------------|-----------------|-----------------------------|-----------------|-----------------|
| | | Labor | Fuel & Repairs | Materials | Cost | |
| Cultural Costs | | | | | | |
| Irrigate, 6½x | 5.2 | \$13.52 | | 36 acre inches applied | \$12.71 | \$ 26.23 |
| Insect Control (contract) 1x | | | | | 4.44 | 4.44 |
| Rodent Control, 1x | .2 | .59 | \$.28 | 3 lbs. bait @ 60¢ applied | 1.80 | 2.67 |
| Weed Control, ½x (contract) | | | | | 4.93 | 4.93 |
| TOTAL CULTURAL COST | | \$14.11 | \$.28 | | \$23.88 | \$ 38.27 |
| Harvest Costs | | | | | | |
| Swath, 5½x | 1.4 | \$ 4.90 | \$ 4.38 | | | 9.28 |
| Rake, 5½x | 1.4 | 4.90 | 2.17 | | | 7.07 |
| Bale, 5½x | .84 | 2.94 | 4.13 | wire @ \$1.50/ton | \$10.50 | 17.57 |
| Pickup & roadside bales, 5½x | .56 | 1.96 | 2.00 | | | 3.96 |
| TOTAL HARVEST COST | | \$14.70 | \$ 12.68 | | \$10.50 | \$ 37.88 |
| Cash Overhead | | | | | | |
| Misc., office, pickup, insurance, interest on operating capital, 12% of cultural costs | | | | | | \$ 4.59 |
| Taxes on stand and equipment | | | | | | 6.69 |
| Land rent, including well | | | | | | 80.00 |
| TOTAL CASH OVERHEAD | | | | | | \$ 91.28 |
| TOTAL CASH COST | | | | | | \$167.43 |
| TOTAL CASH COST PER TON | | | | | \$23.92 | |
| MANAGEMENT | | | | | | |
| 5% of 7 tons @ \$42 per ton | | | | | | \$ 14.70 |
| Investment Costs | | | | | | |
| | | PER ACRE (2) | | ANNUAL COST PER ACRE | | |
| | | | | Depreciation | Interest | |
| Pickup truck, ½-ton | | 17.00 | | 2.13 | .68 | |
| Tractor, diesel wheel, 40 hp (1) | | 39.60 | | 3.96 | 1.58 | |
| Tractor, gas wheel, 30 hp (1) | | 31.17 | | 3.12 | 1.25 | |
| Swather, self-propelled, 12 ft. | | 54.67 | | 6.84 | 2.19 | |
| Rake, side delivery, 8 ft. | | 6.00 | | .60 | .24 | |
| Baler, 3-wire | | 56.00 | | 5.60 | 2.24 | |
| Bale loader-staker, self-propelled | | 93.33 | | 11.67 | 3.73 | |
| Gopher bait applicator | | 3.66 | | .24 | .15 | |
| Sprinklers, risers, laterals, mainlines | | 32.61 | | 3.26 | 1.30 | |
| Booster pump, 50 hp | | 43.40 | | 6.20 | 1.74 | |
| Shop and equipment storage | | 45.00 | | 1.13 | 1.80 | |
| Alfalfa stand | | 83.20 | | 20.80 | 3.33 | |
| TOTAL INVESTMENT OVERHEAD | | 505.64 | | 65.55 | 20.23 | \$ 85.78 |
| TOTAL COST PER ACRE | | | | | | \$267.91 |
| TOTAL COST PER TON | | | | | \$38.28 | |

COST OF PRODUCTION AT VARYING YIELDS

| YIELD -- Tons Per Acre | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|
| COST PER TON | \$63.12 | \$51.52 | \$43.79 | \$38.28 | \$34.14 | \$30.92 | \$28.35 |

ALFALFA HAY
San Benito County, 1973
APPENDIX --- COSTS USED

DETAILS OF FUEL & REPAIR COSTS FOR MACHINERY & EQUIPMENT

| | Size ⁽¹⁾ | Hrs. Per <u>Acres</u> | Hrs. Per <u>Ton</u> | Fuel & Repairs <u>Per Hour</u> | Cost Per <u>Acres</u> |
|---|---------------------|--------------------------|------------------------|-----------------------------------|--------------------------|
| Tractor, diesel wheel | 40 hp | | | \$1.34 | |
| Tractor, gas wheel | 30 hp | | | 1.20 | |
| Gopher bait applicator | | 0.2 | | .21 | \$.04 |
| Swather, self-propelled | 12 ft | 1.4 | | 3.13 | 4.38 |
| Rake, side delivery | 8 ft | 1.4 | | .35 | .49 |
| Baler, 3-wire | | | 0.12 | 2.77 | 2.33 |
| Bale, loader-stacker, self-propelled | | | 0.08 | 3.57 | 2.00 |

HOURLY LABOR RATES USED

| | <u>Base</u> <u>Rate</u> | <u>Fringes</u> <u>& Other</u> | <u>Total</u> | | <u>Base</u> <u>Rate</u> | <u>Fringes</u> <u>& Other</u> | <u>Total</u> |
|----------------|----------------------------|--------------------------------------|--------------|------------|----------------------------|--------------------------------------|--------------|
| Harvesting | \$2.90 | \$.60 | \$3.50 | Irrigators | \$2.15 | \$.45 | \$2.60 |
| Tractor Driver | 2.15 | .45 | 2.60 | | | | |

(1) Horsepower at 75% of maximum

(2) In this study investment costs charged to alfalfa, of certain machinery and equipment, have been pro-rated between alfalfa stand charges and alfalfa production charges proportionate to estimated use on each.

| | <u>Alfalfa</u> <u>Stand</u> | <u>Alfalfa</u> <u>Production</u> |
|--------------------------------|--------------------------------|-------------------------------------|
| Tractor, diesel wheel, 40 hp | 10% | 90% |
| Tractor, gas wheel, 30 hp | 3% | 97% |
| Sprinkler irrigation equipment | 3% | 97% |
| Shop and Equipment Storage | 10% | 90% |