ALFALFA PRODUCTION IN FRESNO COUNTY

Alfalfa is one of the principal field crops grown in Fresno County. It is produced both as a cash crop in rotation with other field crops and as a source of feed in combination with livestock enterprises. In 1951, approximately 119 thousand acres in the county were planted to alfalfa. This is considerably in excess of the requirements for feeding livestock in Fresno County. Much of the alfalfa hay produced is marketed in Los Angeles and San Francisco bay areas.

Requirements - For maximum production, alfalfa requires a good deep soil. It is moderately tolerant to concentrations of alkali or salts. Under some conditions, good yields have been obtained on soils 3/4 to 4 feet deep. About 4-acre feet of water is required for alfalfa production in Fresno County. This is applied in approximately 9 irrigations during the growing period.

Planting recommendations - Caliverde is the variety best adapted for hay production in Fresno County. Alfalfa should be seeded at the rate of about 18 pounds of seed per acre, either in the fall or in the spring. Fall planting is done from September 15 to December 1 - spring planting from February 1 to March 15. The land to be planted should be properly leveled for economical irrigation. The width of the checks should be determined according to the slope, soil type and the quantity of water that can be turned into each check at the time of irrigating. A smooth firm seeding is essential to obtaining a good stand. Ring rolling or harrowing should immediately follow seeding. Ring rolling presses sufficient soil over and around the seed to insure good germination.

Life of Stand and Yields - The profitable life of alfalfa stands in Fresno County is ordinarily 3 years. In some instances, profitable production will extend into the fourth year. The average yield per acre for the life of the stand is approximately 7 tons per year. In the first year the yield will be about 3 to 4 tons in 3 or 4 cuttings; the second year 8 to 10 tons in 5 or 6 cuttings; and the third year 5 to 6 tons per acre.

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UC Cooperative Extension
**WHAT WILL IT COST TO GROW ALFALFA IN FRESNO COUNTY**

Based on a yield of 7 tons per acre (5 cuttings) on 80 acres
Labor $.90 per hr.; $1.25 per hour for operating baler; light tractor expenses at $1.20 per hour

<table>
<thead>
<tr>
<th>Item</th>
<th>Per Acre</th>
<th>Per Ton</th>
<th>Per Acre Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilizer, ditch &amp; border work, misc; 2 man, 1 1/2 tractor</td>
<td>3.60</td>
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<tr>
<td>Irrigate: 8 man hours</td>
<td>7.20</td>
<td></td>
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<tr>
<td>Mowing: 2 hours man &amp; tractor</td>
<td>4.20</td>
<td>.66</td>
<td></td>
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<tr>
<td>Rake &amp; turn: 2.4 hours man &amp; tractor</td>
<td>5.28</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Baling: man labor 50¢ per T + 1.6 tractor hrs. &amp; fuel 50¢</td>
<td>5.92</td>
<td>.85</td>
<td></td>
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<tr>
<td>Haul &amp; stack sales: at $2.00 per ton</td>
<td>14.00</td>
<td>2.00</td>
<td></td>
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<tr>
<td><strong>Total labor &amp; field power</strong></td>
<td>40.60</td>
<td>5.80</td>
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<tr>
<td>Irrigation water: tax &amp; power — 4 acre feet</td>
<td>9.00</td>
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<td></td>
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<tr>
<td>Fertilizer: annual average</td>
<td>7.00</td>
<td></td>
<td></td>
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<tr>
<td>Baling wire &amp; miscellaneous</td>
<td>8.00</td>
<td>1.14</td>
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<tr>
<td><strong>Total Material Cost</strong></td>
<td>24.00</td>
<td>3.43</td>
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<tr>
<td>General expense: office, phone, car, etc.</td>
<td>3.26</td>
<td></td>
<td></td>
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<tr>
<td>County taxes</td>
<td>5.25</td>
<td></td>
<td></td>
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<tr>
<td>Repairs, insurance &amp; misc. overhead</td>
<td>4.00</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total cash overhead cost</strong></td>
<td>12.51</td>
<td>1.79</td>
<td></td>
</tr>
<tr>
<td><strong>Total cash and labor cost</strong></td>
<td>77.11</td>
<td>11.02</td>
<td></td>
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<tr>
<td><strong>Depreciation:</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Stand: $30 cost — 3 yrs. life</td>
<td>10.00</td>
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<tr>
<td>Irrigation facilities: $60 cost — 20 yrs. life</td>
<td>3.00</td>
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<tr>
<td>Tillage, fertilizer &amp; misc. equip: $10 — 10 yrs. life</td>
<td>1.00</td>
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<tr>
<td>Harvesting equipment: $50 cost — 10 yrs. life</td>
<td>5.00</td>
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<tr>
<td><strong>Total depreciation cost</strong></td>
<td>32.00</td>
<td>4.57</td>
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<tr>
<td><strong>Interest on investment at 5%</strong></td>
<td></td>
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<td></td>
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<tr>
<td>On stand, irrigation facilities harvesting and other equipment at 1/2 original cost $75</td>
<td>3.75</td>
<td></td>
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<tr>
<td>Land at $500.00</td>
<td>25.00</td>
<td></td>
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<tr>
<td><strong>Total interest on investment</strong></td>
<td>28.75</td>
<td>4.11</td>
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<tr>
<td><strong>Total cost of production</strong></td>
<td>124.86</td>
<td>17.84</td>
<td></td>
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<tr>
<td>Less credit for pasture or extra cuttings</td>
<td>5.00</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td><strong>Net cost of producing hay</strong></td>
<td>119.86</td>
<td>17.13</td>
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</tbody>
</table>

If all harvesting is contracted the total cost will be increased $1.50 to $2.50 per ton.

The cost of harvesting is based on the use of a one-man automatic baler.