

UNIVERSITY OF CALIFORNIA
Agricultural Extension Service
Calaveras County

Pasture

February 1964

Estimated Costs to Improve Brush-land Range in
Calaveras County.

Range improvement work in Calaveras County is changing brushlands to grasslands. This work increases feed supplies for livestock and wildlife, improves watersheds and reduces the hazard of wildfires.

Range improvement work involves the removal and control of brush, reseeding with desirable forage plants and proper grazing management. Ranchers doing this work uses technical "know-how" as skillfully as does the farmer of croplands in the valley areas of California.

Controlled fire is one of our most economical methods to remove undesirable brush from carefully selected rangeland sites. Controlled fire costs per acre will average \$5.00 to \$12.00 per acre depending upon the amount of pre-burn preparation required.

Many methods are used in brush-land improvement. Usually, best results are obtained by railing or rolling brush down by bulldozer blade or with a brush-rake and burning one or two years later. Large trees that are not wanted are "poisoned" by injectors or cut treatments with 2, 4-D two or three years before the control range improvement burn. Immediately following a hot clean burn, desirable forage plants should be seeded in the ash. If competition from brush is a problem, range managers usually find it pays to disc the soil following a burn following early rains and seeding summer growing sudan early in May. Seeding of the permanent cover is made in the sudan stubble during late September without further cultivation.

Estimated costs on the following page may be useful to you as a sample of costs that have been supplied by livestock producers who have made continuous range improvement a part of their successful livestock management program.

Feed produced from these range improvement practices are less expensive than feed made available by buying more brushland on the present-day land markets.

By: Daniel M. Irving - University of California Farm Advisor
Calaveras County.

Philip S. Parson, Agricultural Extension Economist.

James E. Street, Agricultural Extension Range Management
Specialist.

Co-operative Extension Work in Agriculture and Home Economics U.S.
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Estimated Costs to Improve Brush-land Range by Fire and
 Mechanical Control in Calaveras County.

<u>Expenses per acre:</u>	<u>1st Year</u>	<u>2nd Year</u>
Disc (contract)	3.00	
Fertilization:		
0.3 hr. labor & equipment	.75	
48 lbs. nitrogen @ 11¢ lb.	5.28	
60 lbs. phosphate @ 12¢ lb.	7.20	
<u>Seeding:</u>		
8 lbs. Piper sudan	.96	
6 lbs. Harding-3 lb. legume	6.40	
Planting, labor & equipment	1.50	
Misc., office, telephone burning rolled or windrows of brush, sprout con- tracting, etc.	1.17	1.00
<u>Total Cash Costs:</u>	26.26	1.00
Investment Costs:		
Clearing land \$20.X6%/20yrs.	1.20	1.20
Cross fencing \$10/acre		
Depreciation 20 yrs.	.50	.50
Interest 6% ($\frac{1}{2}$ of \$10.)	.30	.30
<u>Range Pasture Stand:</u>		
Depreciation \$26.26/20 yrs.		1.31
Interst at 6% ($\frac{1}{2}$ of \$26.26)		.79
Total Investment Costs:	2.00	4.10
Total Cash Costs:	26.26	1.00
Total All Costs:	28.26	5.10
Cost Per Year Of Production:	5.10	5.10
Income from Range Improvement:		
($1\frac{1}{2}$ ton hay/acre or 9acre/cow yr.)		
$1\frac{1}{2}$ AUM; acre@\$5./AUM	7.50	7.50
Cost of Production/yr.	5.10	5.10
Management income/yr.	2.40	2.40