

CHEMICAL CONTROL OF BRUSH IN LAKE COUNTY

by Willard C. Lusk, Farm Advisor

Foreword

Approximately 300,000 acres of hill land in Lake County is covered with brush and practically unusable for the grazing of sheep and cattle. Much of this land could be converted to grassland with proper management. Large acreages of this brush land are in chamise which can be readily controlled after burning by the use of chemicals.

Program of Control

1. Burn in summer or early fall.
2. Reseed to perennial grasses and annual legumes before fall rains.
3. Apply low-volatile 2,4-D ester by plane in April or early May.

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Brush Burning

The range operator should go over the proposed control burn area with the State Forest Ranger and agree on location of fire-breaks and measures to be taken to eliminate danger spots. He should file with the State Forest Ranger an application for permission to burn. Time to burn should also be approved by the State Forest Ranger, as part of Lake County is closed to control burning for part of the year.

Seeding

Seeding of the following mixture should be done in late September or early October before the first fall rains.

Harding grass	2 pounds per acre.
Smilo	1 " "
Rose clover	1 " "
Sub clover	1 " "

Time to Spray with Chemical

The best time to spray burned over brush land to control seedlings and resprouting brush is April 15 to May 15. Successful tests applying chemicals by plane have been conducted by the Lake County Farm Advisors office on the Norval Brookins ranch, Lower Lake, in April, 1953, and on the Glenn Keithly ranch, Lakeport,

in May, 1954. On the Norval Brookins ranch, 86.5 percent of the resprouting chamise plus 91 percent of the seedlings were killed with 2 pounds of 2,4-D ester per acre.

Method of Application

The most convenient and satisfactory method is by plane at a cost of approximately \$2.00 per acre. On the two tests run in Lake County, 12 gallons of material were applied per acre during the early morning when little or no wind was blowing. This material can be applied any time during the day as long as the wind is not blowing.

Material to Use

Tests run in Lake County have used 2 pounds, 3 pounds, and 4 pounds of 2,4-D ester (low volatile) per acre, as well as 1½ pounds 2,4-D ester plus 1½ pounds 2,4,5-T ester per acre. The 2 pounds 2,4-D ester (low volatile) per acre gave almost as good results as the higher concentrations. The amount recommended per acre is 12 gallons of the following mixture:

- 1½ gallon 2,4-D ester (low volatile)
- 10½ gallons water
- 1 gallon Diesel oil

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Cost Per Acre

The approximate cost per acre of controlling chamise brush by burning, seeding and chemical control is as follows:

Burning	\$0.19 per acre.
(varies according to size)	
Seeding	1.00 "
Seed	3.50 "
Chemical	3.00 "
Plane	2.00 "
(for chemical application)	
Total - - -	\$9.69 "

Agricultural Stabilization & ConservationPayments

Applications for range improvement through control burning, seeding, and chemical control must be made at the Agricultural Stabilization & Conservation office, Kelseyville, prior to doing the work in order to be eligible for U.S.D.A. payments.

If the range improvement work is approved and successfully completed according to specifications, the range operator would be eligible for Government assistance up to 50 per cent of the actual cost.

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