

NEED MORE RANGE GRASS?

remove useless oaks

Studies in Placer County show that grass production can be greatly increased where oaks are controlled. Greatest increase in feed is possible on good soils. Very poor soils may not produce enough grass to make oak control pay.

Useless Oak trees lower range feed production because:

1. Grass is shaded out under trees.
2. Sheep and cattle don't like grass that grows under trees.
3. Growing trees take up water that could be used by grass and animals.
4. Oaks grow on the best range lands using nutrients that could make more grass.

What can be done about it?

1. Kill useless oaks.

How?

1. Tree injector and 2,4-D or axe, oil can and 2,4-D.
2. Bulldozer.
3. Chainsaw and 2,4-D.

What will it cost?

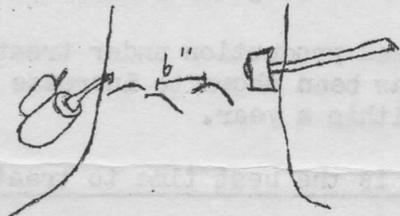
1. Studies in Placer and Glenn Counties show that cost of killing oaks is approximately:

Injector & 2,4-D	\$3-\$3.50/Acre (100 trees)
Axe, oil can & 2,4-D	\$3.35-\$5/Acre
Bulldozer -pile and burn	\$20/Acre
Chainsaw -pile and burn*	\$20/Acre

*If wood can be cut and sold, a profit may be possible.

How can trees be killed with axe, oil can and 2,4-D?

1. Make horizontal cuts (pockets) with axe around base of tree 1' to 2' from ground.



2. Cuts (pockets) should be spaced about 6" center to center. They must be deep enough to go through the bark & into the growing tissue. Do not leave more than 2" bark between cuts.
3. Squirt 2,4-D into cuts with oil can (about $\frac{1}{2}$ teaspoon per cut.)

Much of the information for this leaflet has been taken from work done by Placer County Farm Advisor Walter Johnson and Glen County Farm Advisor Monte Bell. Leaflet compiled by Yolo County Farm Advisor Carl Schoner with assistance from Extension Range Specialist James Street.

In order to simplify this information, trade names of products and equipment are used. No endorsement of named products or equipment, is intended nor is criticism implied of similar products which are not mentioned.

How can trees be killed with a tree injector and 2,4-D?

1. Most tree injectors are a hollow steel tube about 4' long (to hold the 2,4-D) with a chisel on one end to cut into the tree. The injector is driven into the base of the tree and 2,4-D is injected with one motion.
2. Injections are made like axe cuts with 2" of bark between cuts around the base of the tree trunk.
3. 2,4-D may be diluted with an equal volume of water ($\frac{1}{2}$ to $\frac{1}{2}$) when used in an injector. Thinning makes it flow better, saves on 2,4-D cost and does a good job on easy-to-kill trees.

What happens to the trees?

Blue oaks die in about a month. They will begin to fall in 3 to 5 years and can be cleaned up by control burning. Treated trees don't sprout, do rot rapidly.

Will animals eat grass around dead trees?

Animals will begin to eat grass around treated trees in 3 or 4 weeks and prefer it to grass in open areas.

Feed production under treated trees has been shown to increase five fold within a year.

When is the best time to treat?

Trees can be treated at any time of the year, but the highest percentage of kill has been from November through June. During these months the kill has been about 100%.

What kind of 2,4-D do I use and how much does it cost?

Use 2,4-D amine (4 pounds acid equivalent per gallon.) It costs about \$4 per gallon. Use undiluted 2,4-D with

squirt can method. Dilute 2,4-D fifty-fifty with water in injector.

Before buying 2,4-D get a use permit from the County Agricultural Commissioner.

How much does an injector cost and where can I get it?

Injectors cost about \$25 each. Price is reduced if more than one is purchased at a time.

The only known manufacturer is Reuel Little Tree Injector Company, Box 288, Madill, Oklahoma.

What trees can be killed by this method?

1. Easy to kill with standard Blue Oak treatment:
Blue Oak, Cottonwood, Willow, *Valley Oak, and *Digger Pine.

*Be sure and cut through bark & into wood, a heavy axe may be easier than injector.

2. Hard to kill trees where cuts should make a complete frill and 2,4-D diluted very little.

Live Oak, Buckeye, Black Oak, and Madrone.

Has this been tried in Yolo County?

Yes, on the Fred Vanucci and the W. W. Harris Ranches near Capay.

Is financial assistance available for this type of range improvement?

Yes. Oak tree control is eligible for A. S. C. payments of one-half the cost, providing payment doesn't exceed \$3.50 per acre. Make application at the A. S. C. office, 910 Court Street, Woodland, before starting treatment.