

RANGE
IMPROVEMENT
FOR
NAPA COUNTY
RANCHES

AGRICULTURAL EXTENSION SERVICE
University of California
Napa County
1930 **C**lay Street, Napa, Ca.

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Cooperative Extension work in Agriculture and Home Economics, College of Agriculture,
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George B. Alcorn, Director, California Agricultural Extension Service.

WHY IMPROVE YOUR RANGELAND

Cattle and sheep producers of the western states allowed their animals to graze the forage as they found it. When an area was used up, they moved somewhere else. They gave little thought to what they left behind. This worked fine as long as there were new frontiers.

Today those frontiers are gone. We have to make a living off the resources at hand. If these resources won't do the job, we must somehow improve them or go out of business.

Crop farming methods have improved tremendously in the past 50 years as a result of improved farm machinery, increased use of fertilizer, and improved methods of controlling insects, diseases, and weeds. We have been slower to use these methods for range improvement. By and large, we still tend to think of range forage as something we use as is, without much thought of systematically improving or renewing it.

Field tests and experiments by ranchers, farm advisors, and agricultural colleges have developed a large array of knowledge and methods for improving our grazing resources on dryland pastures and rangeland.

This pamphlet outlines several types of range improvement that are useful in Napa County. These appear on the next page. It also refers you to three other publications issued by this office. These describe in more detail how you can apply this newer information to your ranch.

NAPA COUNTY PUBLICATIONS TO HELP YOU IMPROVE YOUR RANGE & DRYLAND PASTURE

1. Range Improvement By Fertilization
2. Range Improvement By Seeding
3. Range Improvement By Controlling Competing Brush and Trees

POSSIBLE FINANCIAL ASSISTANCE

The Agricultural Stabilization and Conservation Service shares the cost of certain types of fertilization, seeding, and brush and tree clearance practices with ranch owners. The types of work for which monetary assistance is offered and the amounts of financial aid for each is subject to change each year. Therefore, no details can be given in this publication. If interested, you should visit the A.S.C.S. Office in Napa for further details.

WHERE AND WHEN TO IMPROVE RANGELAND

Two lists are given below. The first is a list of situations to which range improvement measures can be applied. Each of these is followed by one or more letters that refer to applicable range improvement practices shown in the second list. More detailed descriptions of these practices are given in the publications on the preceding page.

Types of Land to Which Range Improvements May be Applied

1. Cropland on which hay, grain or other crops can no longer be produced profitably. (Applicable practices: if no perennial grass is in the seed mixture, use C,D,E,F,G,M. If a perennial grass is in the seed mixture, use A,B,D,E,F,G,M.)
2. Open grassland with slight to moderate slopes. (Applicable practices: If the types of forage plants are unsatisfactory, use A,B,D,E,F,G,M. If forage plants are satisfactory but you wish to increase the amount of forage produced, use F and M.)
3. Open grassland with slopes too steep to cultivate. (Applicable practices: F & M.)
4. Any grassland or open grass woodland with suitable soil following a controlled or wild fire. (Applicable practices: E, F, and M.)
5. Grass-oak type rangeland with trees mostly spaced more than 250 feet apart. (Applicable practices: F and M.)
6. Grass-oak type rangeland with trees mostly spaced less than 250 feet apart. (Applicable practices: H or I and J followed by E,F, G and M.)
7. Range with dense, almost continuous tree cover. (Applicable practices, H or I and J followed by F,D,E,G,K,M.)
8. Brush-covered rangeland. (Applicable practices: (If brush is burned, use D,E, K and M. If brush is cleared by bulldozer use F followed by D,E,K and M.)

Range Improvement Practices

- A. Cultivate in the spring to reduce weed competition and to prepare a seedbed.
- B. Sow sudangrass to help suppress summer weeds and to provide an interim grazing resource. Or leave the area fallow, but control weeds throughout the summer.
- C. Drill in seed or broadcast and cover seed by rolling with a cultipacker. If soil surface is packed, disc lightly.
- D. Sow adapted range grasses in the fall.
- E. Sow pellet inoculated adapted range legumes in the fall.
- F. Fertilize with single superphosphate and/or with other fertilizers depending on existing soil deficiencies.
- G. Graze or mow in early spring following seeding to control weeds.
- H. Kill unwanted trees using the cut surface method. (See Napa County publication "Range Improvement By Controlling Competing Brush and Trees" for details.
- I. Cut down unwanted trees and treat the freshly cut stump with 2,4-D. Pile and burn the cut trees.
- J. Remove brush and small trees by bulldozer or by crushing and burning.
- K. Spray brush and tree sprouts in the spring or very early summer with recommended herbicides. Do this no later than the second growing season after brush is removed or burned.
- L. Fertilize after the effects of the ash has been lost.
- M. Fertilize after the effects of the preceding fertilization has been lost.

