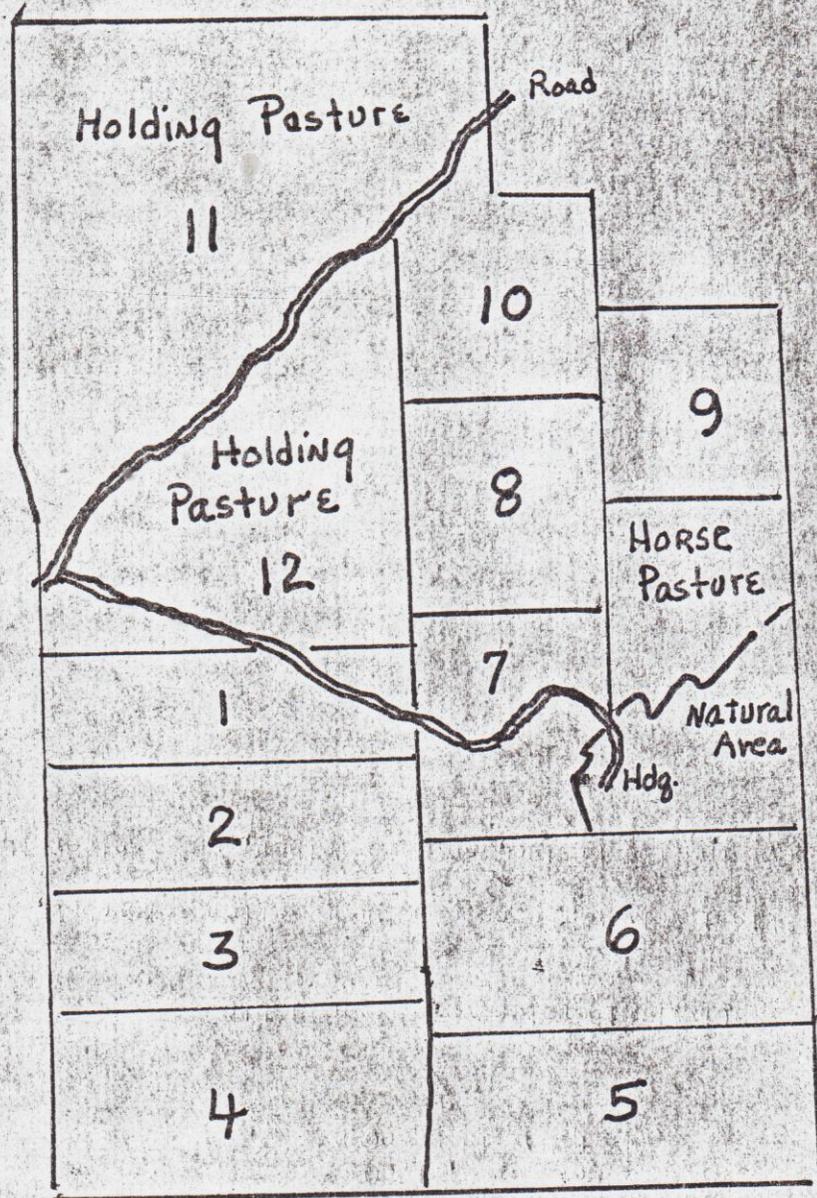


COLLIER COLLEGE
E 2 E B V 2 E
WINTER 1937



— from photograph taken of map of San Joaquin Experimental Range. Undated but was taken from an old scrapbook of the range + in the section of clippings dated 1934-1937.

EXPERIMENTAL RANGE VISITED BY CATTLEMEN

Federal, State Experts Outline
Objectives Of Research
Near O'Neals

MADERA (Madera Co.), May 9.—

The San Joaquin Experimental Range is not merely a piece of land. It is a proving ground to determine what are the best range and livestock practices for this part of California. It is an opportunity for all groups interested in livestock to cooperate in the improvement of the industry. So declared C. E. Racheford of Washington, D. C., assistant chief forester of the United States Department of Agriculture, in a talk to more than 225 cattlemen and others at the opening Field Day of the San Joaquin Experimental Range last Saturday.

The station can be a great success, Racheford said, if all groups, including the stockmen's commit-

tee, the various branches of the University of California, the United States Forest Service, the biological survey, the chamber of commerce, the fish and game associations and the citizens and stockmen of the community continue the co-operation they have thus far exhibited.

S. B. Show, regional forester of the United States Forest Service, pointed out that the management of the foothill ranges is only one of the phases in the management of the national forests.

Fifty Kinds Of Grass

More than fifty varieties of grasses from all over the world were examined during the day. Of the varieties examined, sweet clover, two new varieties of alfalfa, Harding grass, crested wheat grass, buffalo grass, needle grass and several species of Gramma grass attracted the most attention.

Dr. H. H. Biswell, doing the grass investigational work, pointed out that the station would first endeavor to find plants which were adapted to the region and that the plants later would be taken out onto the ranges in surrounding areas to see if they are more adaptable than those now grown.

M. A. Benedict, Sierra National Forest supervisor, led the discussion at the rainfall runoff plots and pointed out that the plots were for the purpose of determining the effect of different degrees of grazing and burning on erosion and runoff.

At Northfork forty times more water has run off the burned plots than from the unburned plots and 200 times as much material has been washed away through erosion from the burned plots.

Stanley Freeborn, speaking in place of Dean Hutchison of the college of agriculture, said the San Joaquin Experimental Range was

not for the glorification of the United States Department of Agriculture nor the University of California but that it was a testing ground for the benefit of those engaged in the management of range lands and livestock.

Range Has Deficiencies

Dr. G. H. Hart, head of the division of animal husbandry of the University of California, pointed out that the natural range in many parts of California has been found by the university to be deficient in

phosphorus, protein, vitamin A and total energy intake. This is particularly true of the granite area on which the station is located. This deficiency, Dr. Hart explained, particularly affects the fattening of cattle and the percentage of calf crop.

It was found that stock had difficulty in even maintaining themselves without supplemental feeding or being grazed in the high mountain range or in the valley. One big problem which will be attacked at the station will be how best to use the range feed to the fullest extent and still develop the animals to the point which the market demands by properly supplementing the range feed and yet keep within economic returns. This problem must also be attacked from the standpoint of the plant man and in relation to soil erosion problems. The University of California purchased seventy head of good uniform grade Hereford cattle from Clay Daulton to stock the experimental range.

An interesting study is being conducted by Dr. A. W. Sampson of the forestry division of the University of California on the chemical relationships of the principal forage plants at the station. Some unexpected variations are being found in the chemical makeup of the different plants. Sampson pointed out. Not only do the plants vary in the different chemical constituents but they vary as to the time when they lose their mineral and organic constituents. By a continuation of the study it will be possible to state the particular season when the nutrition of the range should need supplementing.

Study Rodent Control

E. E. Horn of the United States Biological Survey explained the purpose of the rodent enclosures which are set up to measure the effect of squirrels, gophers, kangaroo rats and other rodents and near rodents on the range.

It is desirable to determine the amount of forage consumed by each species of animal and the effect of the different species on the consumption and destruction of forage cover. Four plots already have been set up, ranging from one-quarter to

half an acre in extent. The majority of the work will, however, be done outside of these plots. On a series of plots on the Pacheco Pass, which Horn is supervising, he said squirrels take nearly 50 per cent of the total range.

E. I. Kotok, director of the California Forest and Range Station, explained the purposes of the station. He said he hoped the station would be the center for the livestock men and farmers of the vicinity.

3,500-Acre Range

The San Joaquin Experimental Range consists of 3,500 acres which has been established as a field laboratory to study range and livestock management problems of the region, stated M. W. Talbot, range specialist of the United States Forest Service. How to increase the carrying capacity of the range, the management of game and wild life, and the effect of lime and heavy grazing are problems which will be attacked immediately. At first the experimentation will be confined to cattle only, he pointed out. Possibly later on sheep will be included. One statement made by Talbot which caused considerable surprise was that detailed studies with hundreds of samples showed in 1935 the pastures produced from 1,000 to over 1,600 pounds of forage per acre.

J. W. Nelson, superintendent of the experimental range, and E. L. Garthwaite, Madera County farm advisor, welcomed the guests and arranged the plan for the meeting.

Harvey A. Russell, chairman of the stockmen's advisory committee, was the general chairman of the day and urged stockmen to take advantage of the opportunity presented by having the experimental range located in the foothills of the San Joaquin Valley. The stockmen's committee, he stated, has met with the men in charge of the station and found them anxious to carry on their work in such a manner as to bring the greatest good to the livestock industry.

Are Fed Differently

H. R. Guilbert, in charge of beef cattle investigations of the University of California, who has direct supervision of the experimentation of beef cattle on the station, pointed out that the herd has been divided into two groups, one group fed supplements only in emergency, the other, whenever necessary to maintain the animals in thrifty condition at all times, in order to compare the effect on growth and reproduction. Detailed cost records are being kept and these should show whether not it is practiced to operate breeding herd in this area on a year around basis or if the supplements should be used.

L. H. Rocheford, livestock specialist of the extension service, demonstrated the grading of beef heifers. He advocated the grading of breeding herds into at least two classes and using the best bulls on the best females and saving the calves from their breeding.

Professor Walter Mulford, chief of the division of forestry of the University of California; John Curry, secretary of the California Cattlemen Association; Chester Wing, secretary of the California Wool Growers Association; Phil Klipstein, past president of the California Cattlemen Association, and P. L. Arbos, president of the California Wool Growers Association, were introduced and made brief remarks.

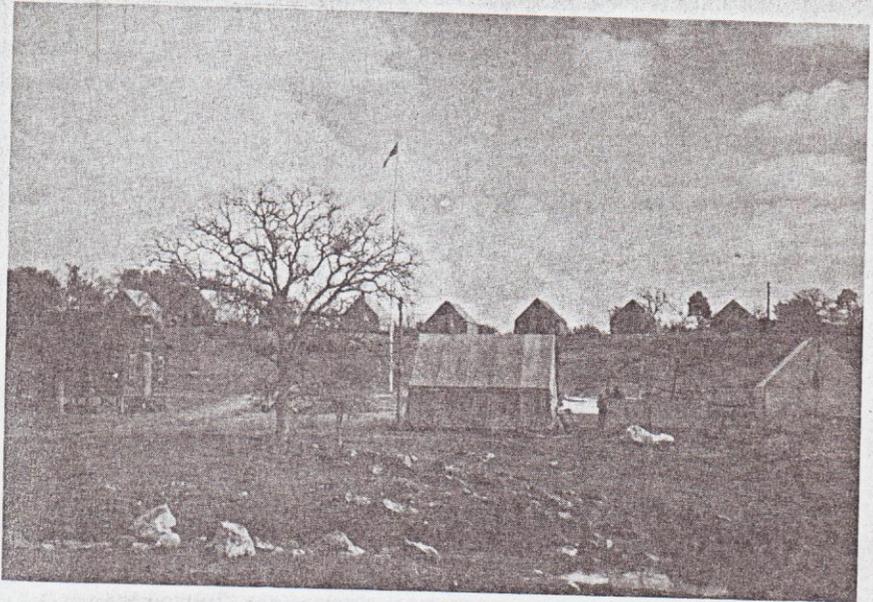
The stockmen's advisory committee consisted of H. A. Daulton, Clay Daulton, A. C. Thompson, Brooke Mordecai, Jesse Blackwell, O. P.

Fresno Bee
May 10
1936

proved safe and effective neighborhood.

Next season will begin
experiment of potential
next year will be the
most promising kind for
experimental purposes.
to explore the possibilities
of the present forest
management.

Scrapbook
1936

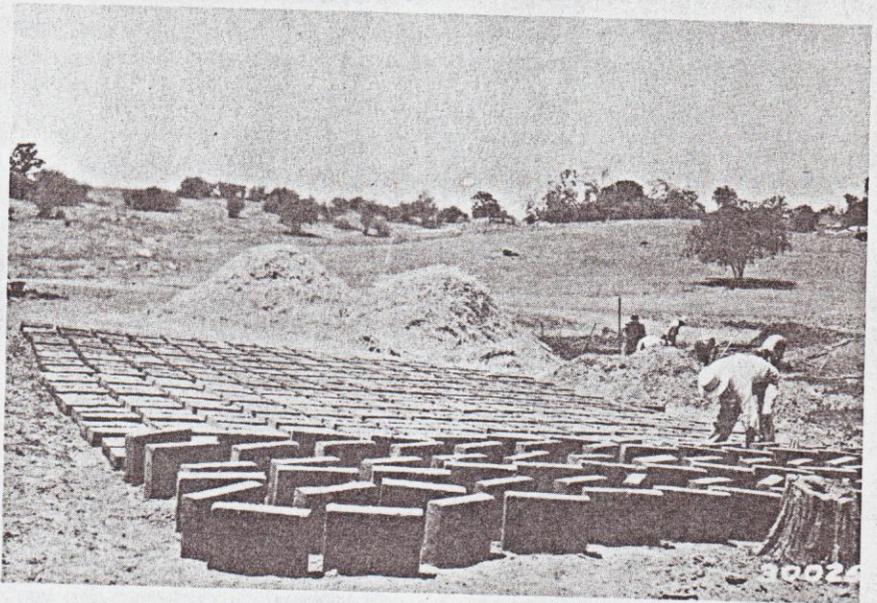


CCC Camp, San Joaquin Experimental Range



Experimental Herd in the Sorting Corrals

1936
Scrapbook

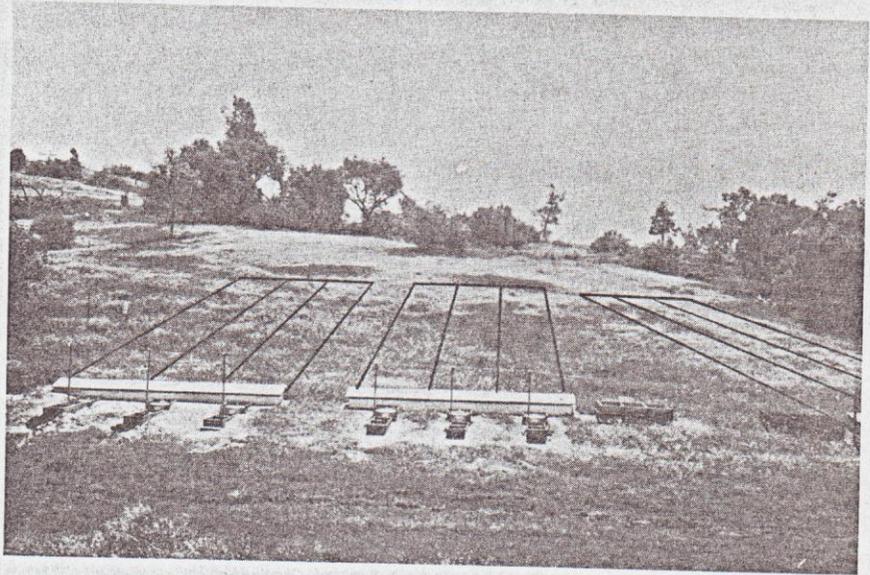


Drying Adobe Bricks for the Headquarters Building



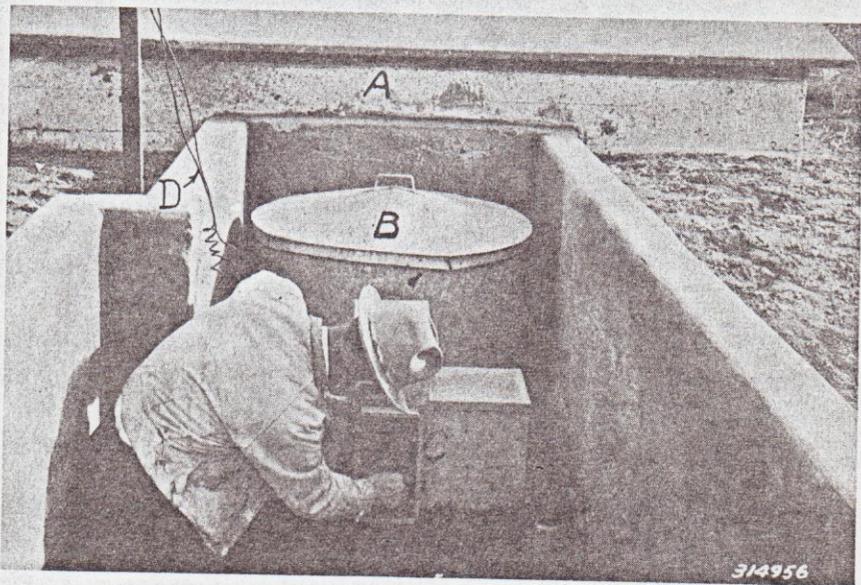
Adobe Headquarters Building

1936
Scrapbook



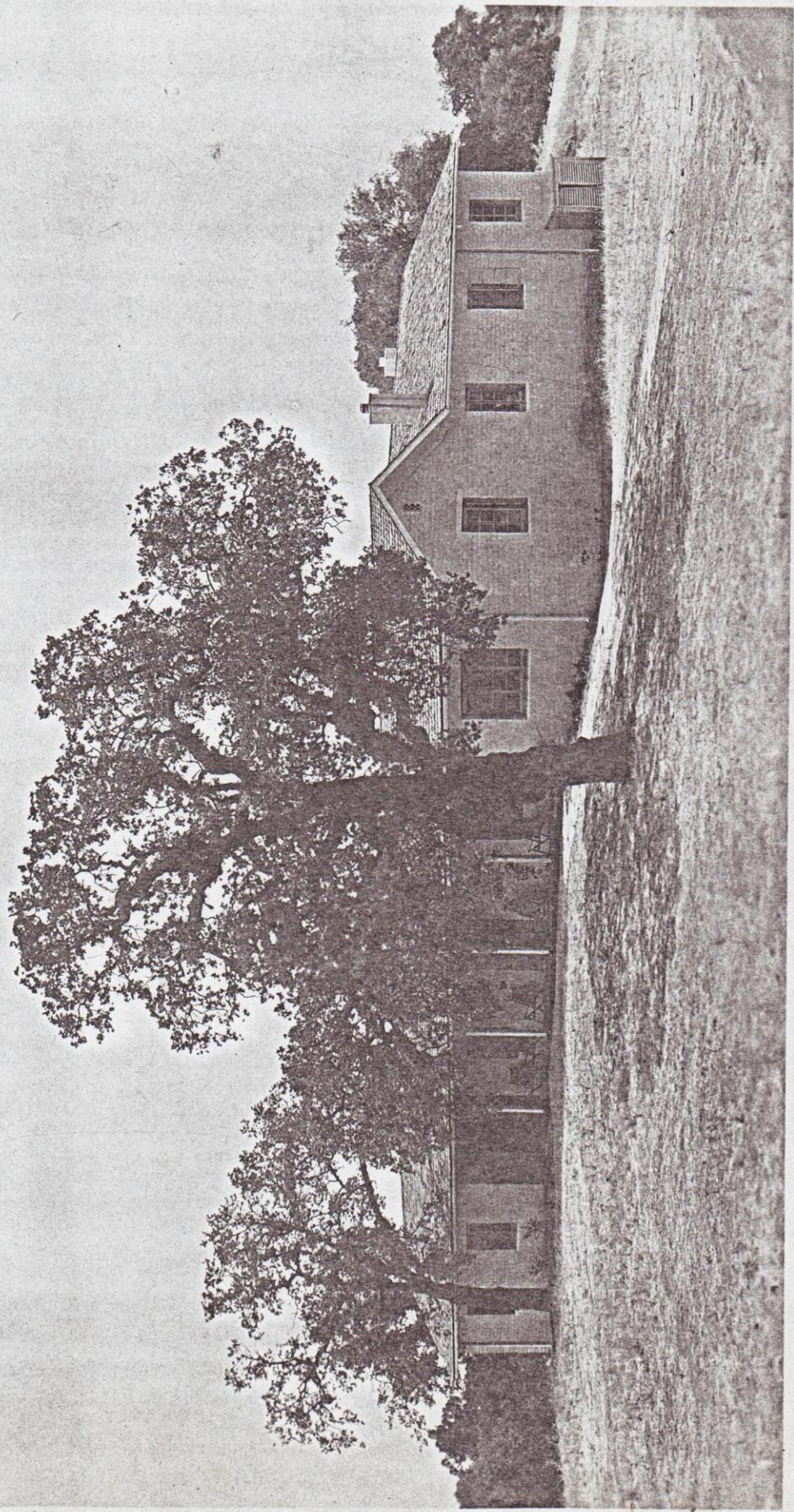
Run-Off Plots After One Season

The black lines outline the 1/40-acre plots. The crop of forage, at the height of the growing season when the photograph was taken, obscures most of the side-boards which rim the boundaries of the plots on the ground.



A Close-Up of Pit at the Foot of Each Run-Off Plot

- A -- Concrete catchment trough
- B -- Settling tank
- C -- Tipping-bucket measuring device
- D -- Wires connecting measuring device with central-recording mechanism.



1937 Range Headquarters - from Scripps