

Conservation in Pueblo Agriculture: I. Primitive Practices

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CONSERVATION IN PUEBLO AGRICULTURE

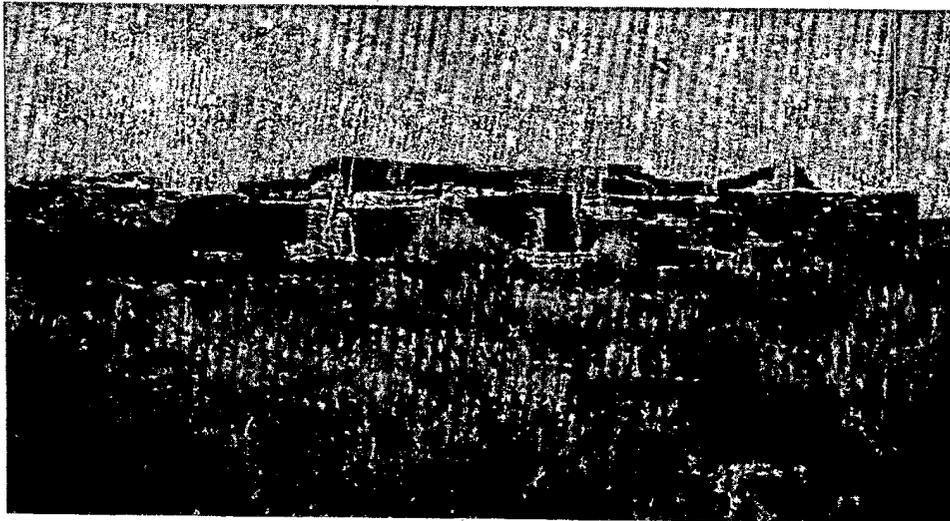
I. PRIMITIVE PRACTICES

By Dr. GUY R. STEWART

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IN the arid Southwest we find some of the oldest settled agricultural communities in the United States among the twenty-six Pueblo villages. The sketch map, Fig. 1, shows the general extent of the Pueblo country which embraces the southern portions of Utah and Colorado, with the states of Arizona and New Mexico, together with adjacent areas of northern Chihuahua. It is a land with a wide diversity of topography and great variations in local conditions, but the environment presented certain similarities in the problems the early agriculturist had to solve in order to obtain a living. Throughout much of the region

high summer temperatures may prevail, although on the upland plateaus, as at Mesa Verde and the Taos Valley, the elevation reduces extreme heat. Over the entire region, however, rainfall has frequently been deficient and at all times is highly variable, so that moisture has been the greatest limiting factor in crop growth. All the settled tribes that have lived in this land of desert and mesa have had a unifying interest; they have been sedentary farmers using a specialized maize agriculture as their principal support, in a country where average conditions are more rigorous than those found in the Dust Bowl.



FAR VIEW HOUSE AT MESA VERDE
THE LARGEST CENTRAL PART OF THE GROUP OF VILLAGES, NEAR THE HEAD OF THE FLOOD WATER
DITCH ON CHAPIN MESA.

—Stewart

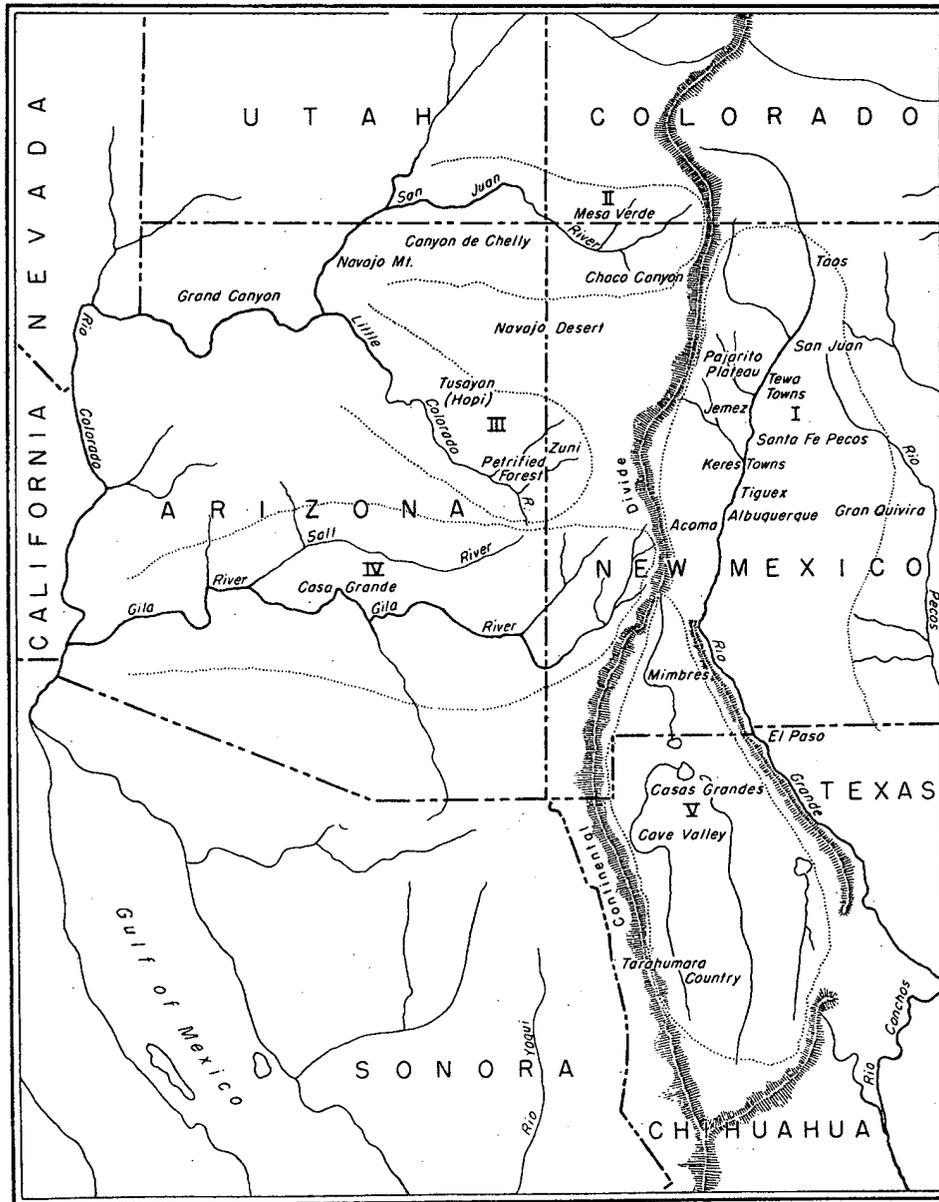
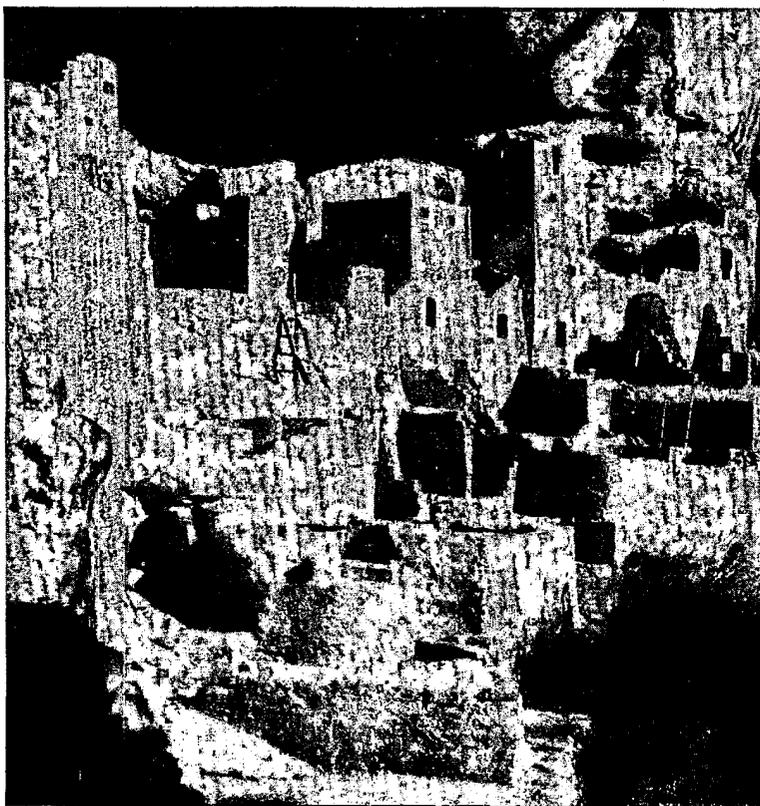


FIG. 1. MAP OF THE PUEBLO PLATEAU
 PUEBLO CULTURE AREAS: I—RIO GRANDE; II—SAN JUAN; III—LITTLE COLORADO; IV—GILA;
 V—MIMBRES CHIHUAHUA. AFTER MAP BY SCHOOL OF AMERICAN RESEARCH.

ods similar to those of the Hopi and Zuni were followed in early plantings on the plateau. Balls of raw cotton yarn or wicking, as well as cotton string with feathers wound around them, have been reported from the ruins. More of these cotton materials have been reported from ruins south of the Mancos River than from those north of this point. Well-woven cotton cloth has also been found by Fewkes at both Spruce Tree House and Cliff Palace, but no caches of cotton seed have been reported.

The writer has discussed the possibility of growing cotton at Mesa Verde with several cotton specialists of the Department of Agriculture. Studies have been

made by Dr. T. H. Kearney of native Hopi cotton, which is still grown for ceremonial purposes near the Hopi villages at the present day. The Hopi cotton has been found to have a shorter growing period than the usual agricultural varieties, and it is not impossible that an earlier maturing strain might have been isolated from Pueblo cotton varieties, by careful hand selection, choosing the plants which blossomed and matured earliest in the fall. A study of the frost-free period at Mesa Verde shows a notable variation in the date of the last killing frost during the last 16 years of available records. In two years it was as early as April 8, but in two other



—Stewart

CLIFF PALACE, THE MOST EXTENSIVE VILLAGE AT MESA VERDE
THE HOUSES AND KIVAS ARE SO COMPLETE THAT THE RUIN APPEARS READY FOR OCCUPANCY.