BERKSHIRE PLATEAU, MASSACHUSETTS: A SUPPLEMENT

by Frank E. Egler

The purpose of this paper is to present what today might be called a "data base" for the Vegetation Zones (Fig.1) of the Berkshire Plateau of Massachusetts (Fig.2), both figures taken from my paper of this title (Ecol. Monogr. 10:145-192. April, 1940). The range maps of eight significant tree species (Figs. 3-10) are Plates VI to XIII of "Upland Woody Vegetation of the Berkshire Plateau. A Dissertation Presented to the Faculty of the Graduate School of Yale University in Candidacy for the Degree of Doctor of Philcsophy, New Haven, Connecticut. 1936" by Frank E. Egler.

Thru the years I have been repeatedly questioned as to the scientific basis for the Zones of figure 1. In 1934-1935, the Plateau was criss-crossed by every available road, and by foot in some roadless stretches. Critical species were marked on U.S.G.S. topographic maps (on file at Aton Forest). The Zone lines were first drawn upon the topographic maps. As has been true of all Vegetation Zone mapping, they show no more than relative continuities between relative discontinuities (interestingly called "ordination" if one is blind to the continuities, and "classification" if one is blind to the discontinuities).

The reader will ask whether after the lapse of half a century my view, or the actual Vegetation, has markedly changed. I have had roots in this region since 1926; and it has been my year-round home since the end of 1945. The early views on this Vegetation have been elaborated, intensified, expanded, verified, but not basically altered. I did, in 1936, discuss the words "virgin", "succession", and "climax". But it must be remembered that I was getting my degree from George E. Nichols. Furthermore, I was supposed to be applying his ideas on the "Ecological Classification of Plant Communities" (Ecology 4:11-23. 1923). Actually, I was not applying those ideas, but testing them. Altho I have not made any intensive over-all re-study of the area, I am not aware of any significant changes in tree ranges which would alter the zonal boundaries of the typical Mid-slope Vegetation. Unquestionably, these Zonal boundaries have altered since glacial times, both gradually and saltatorily, and even in reverse motion, but I have no evidence yet of such movement in this last half-century. I make no predictions whatsoever for the future.

The various plant-communities of these Zones have changed. The trees (and I) are 50 years older. The historic pre-1935 influences by Europeans can still be interpreted. Recent climatologic, pathologic and anthropic impacts are obvious, and changing situations are being kept under observation and experimentation. One new factor was totally unanticipated: the huge increase in deer population in most areas, with changes in forest understory physiognomy, in composition, and especially with respect to the "advance reproduction" that becomes the land-owner's coming forest crop, always promised by the lumberman. Long-term academic and practical research opportunities on preserved Natural Areas are plentiful.

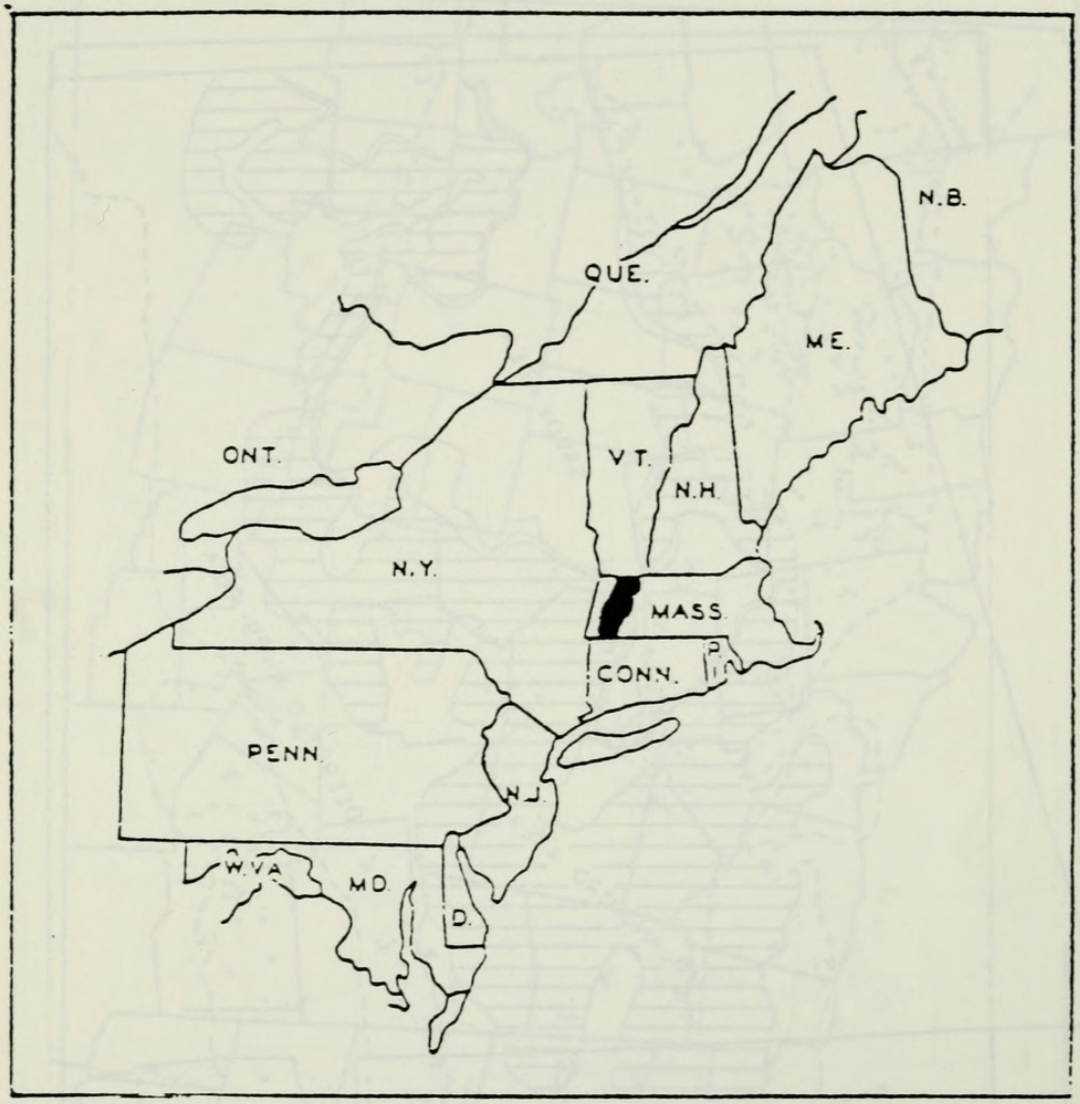

Fig. 1 Map of east-central North America, showing the location of the Berkshire Plateau in Massachusetts.

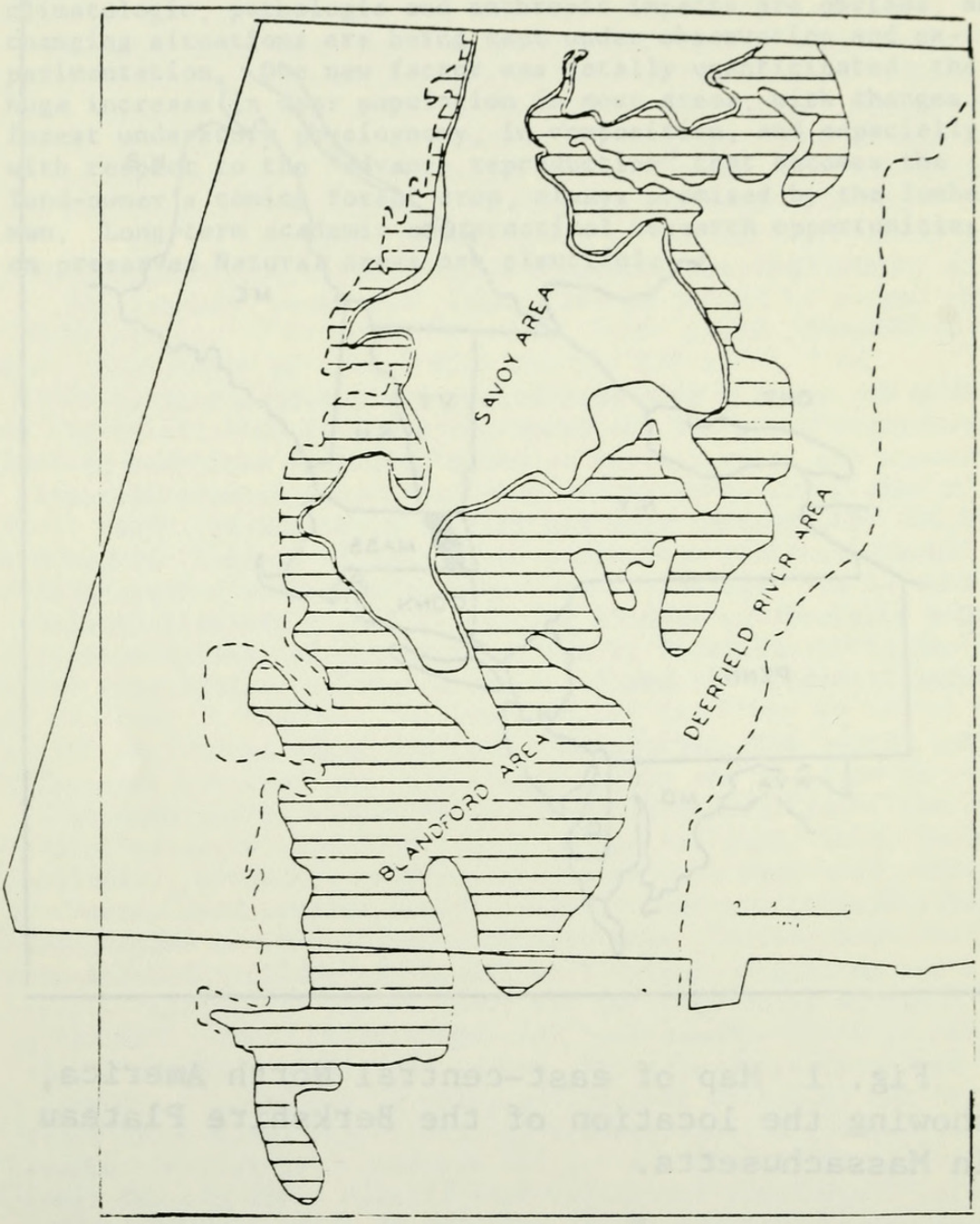

Fig. 2 Map of western Massachusetts, showing the location of the Deerfield River, the Blandford, and the Savoy areas, zones B, C, and D, respectively, on the Berkshire Plateau.

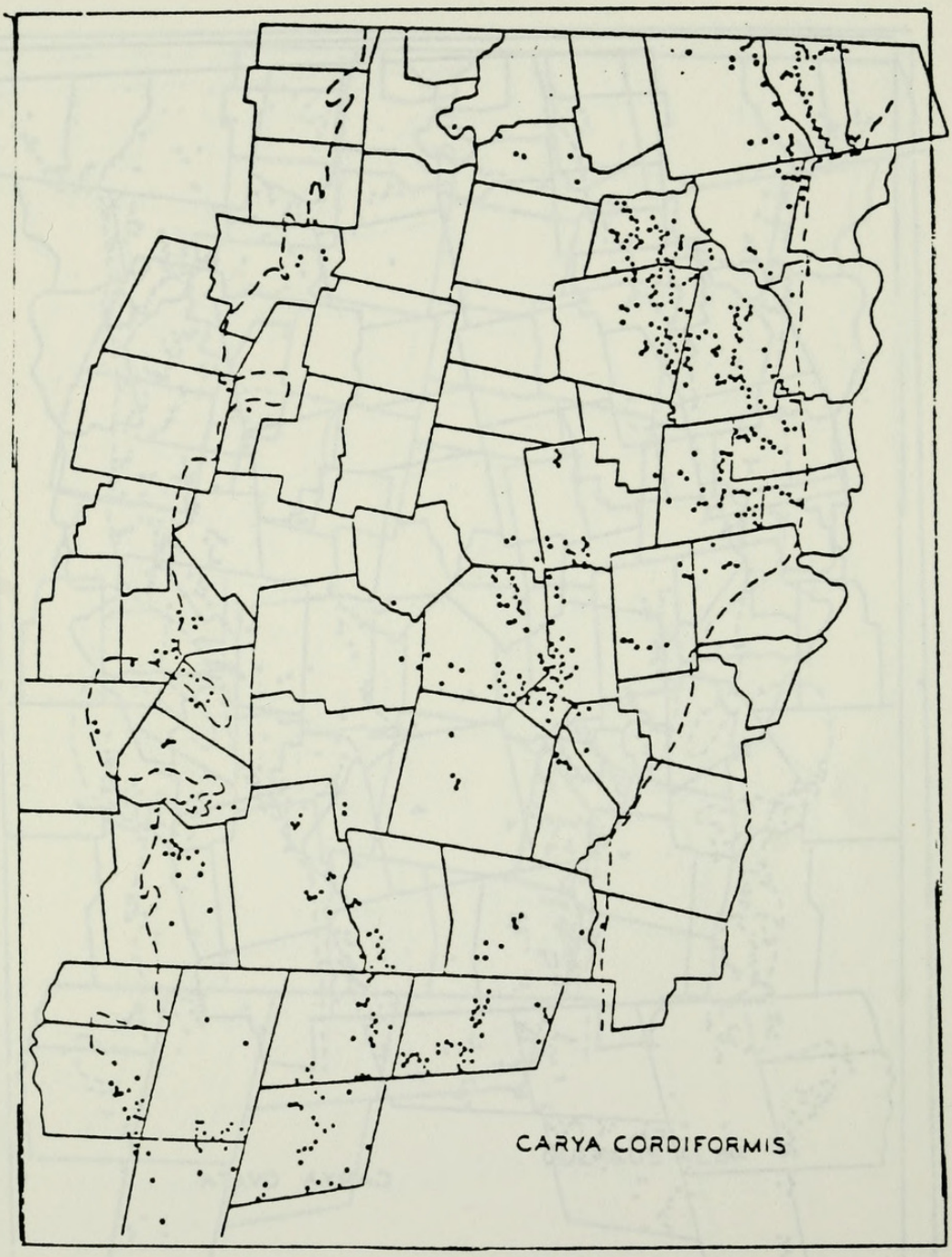

Fig. 3 Distribution on the plateau of Carya cordiformis. In this and the succeeding seven plates, each dot indicates the existence of one or several individuals of the species which have been located during the course of the present study.

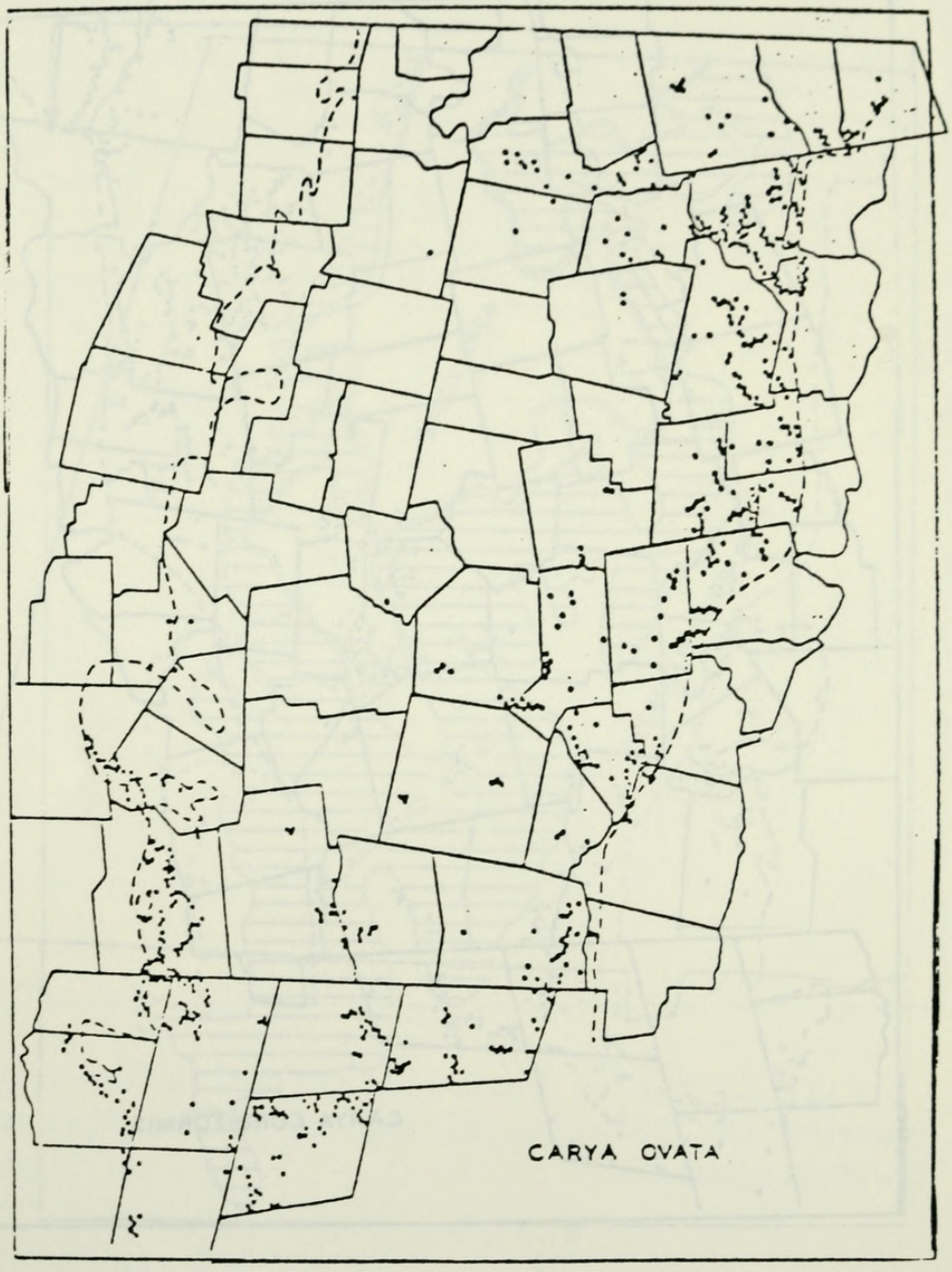

Fig. 4 Distribution on the plateau of Carya ovata.

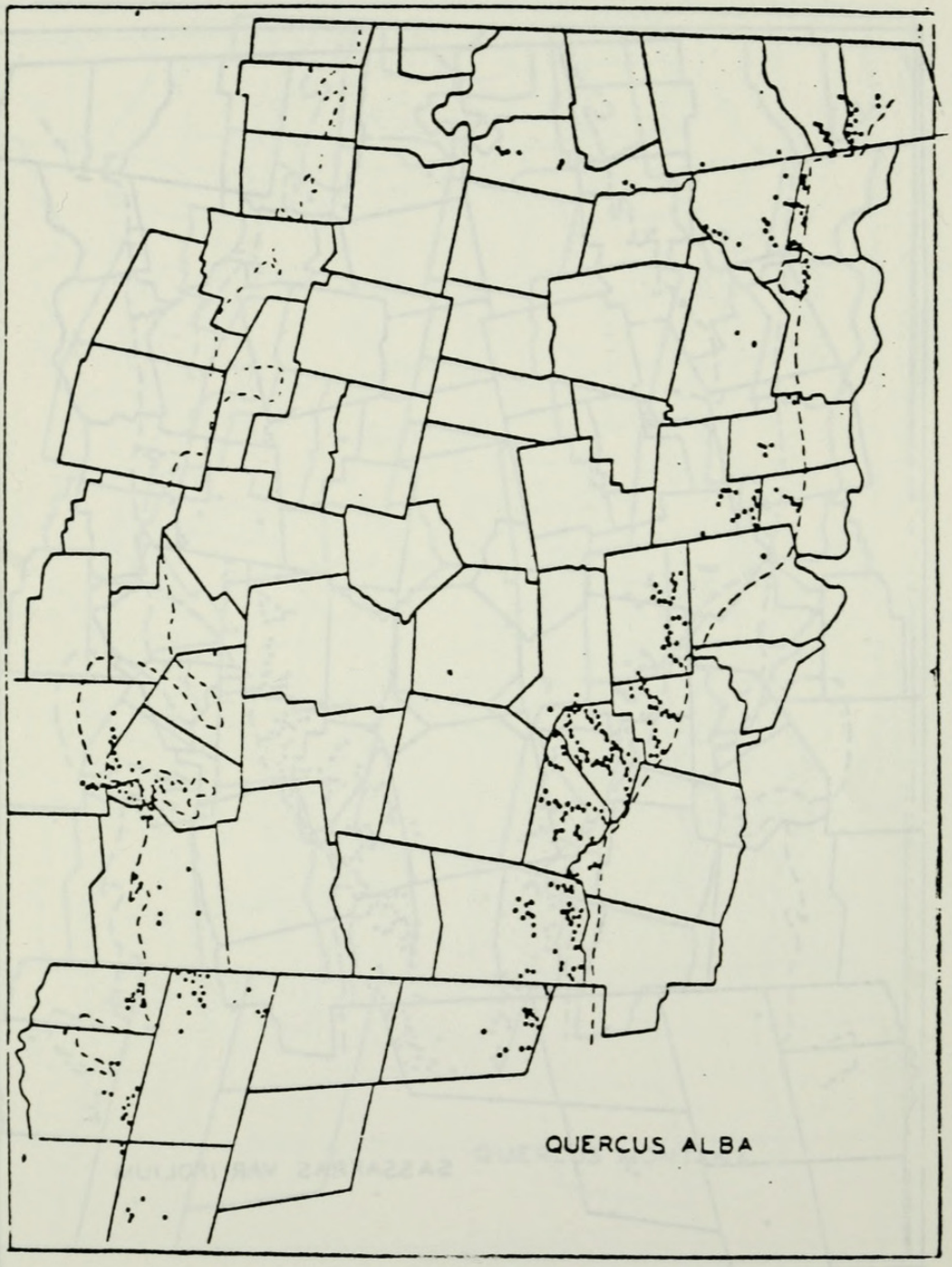

Fig. 5 Distribution on the plateau of Quercus alba.

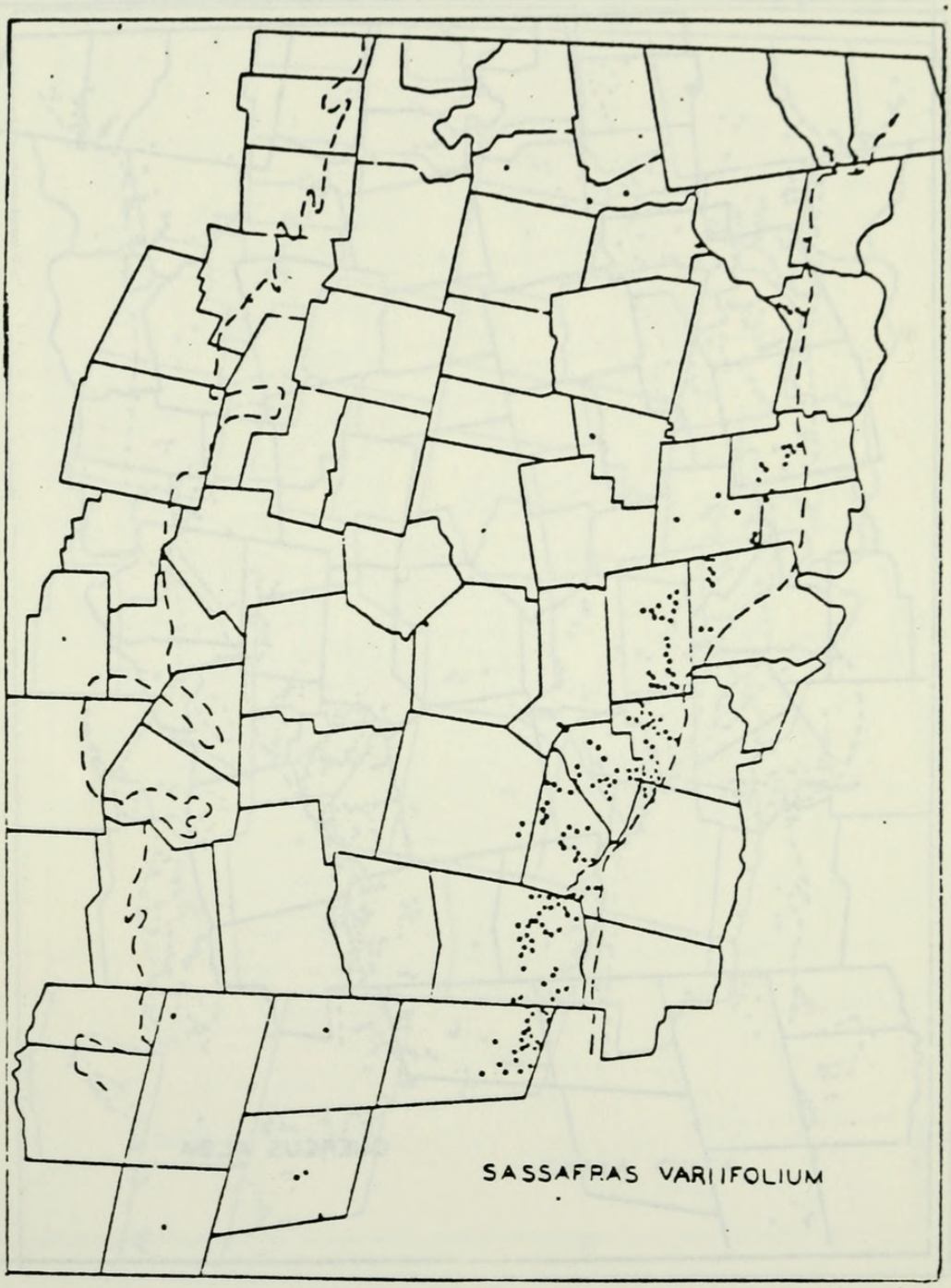

Fig. 6 Distribution on the plateau of Sassafras variifolium.

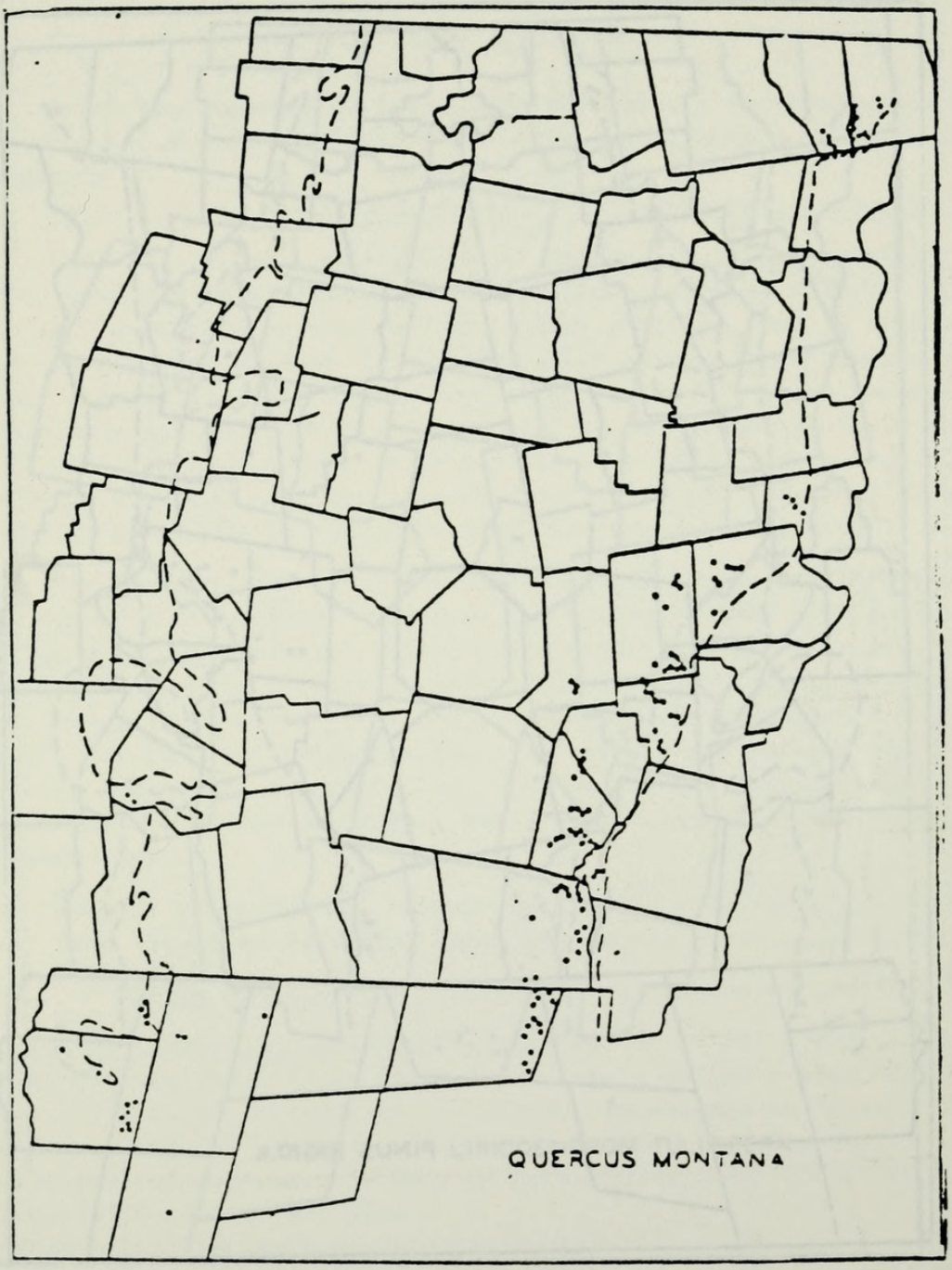

Fig. 7 Distribution on the plateau of Quercus montana.

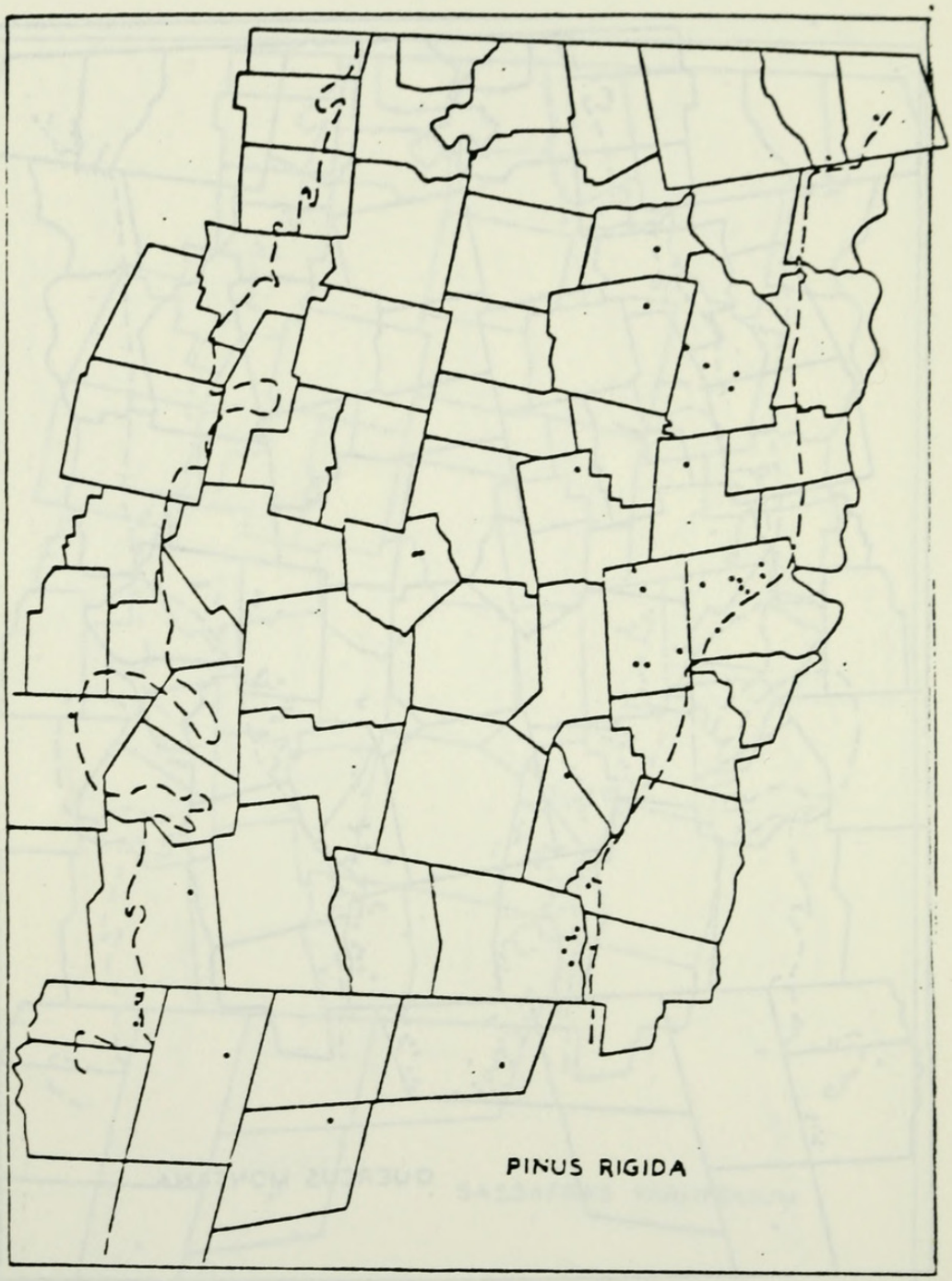

Fig. 8 Distribution on the plateau of Pinus rigida.

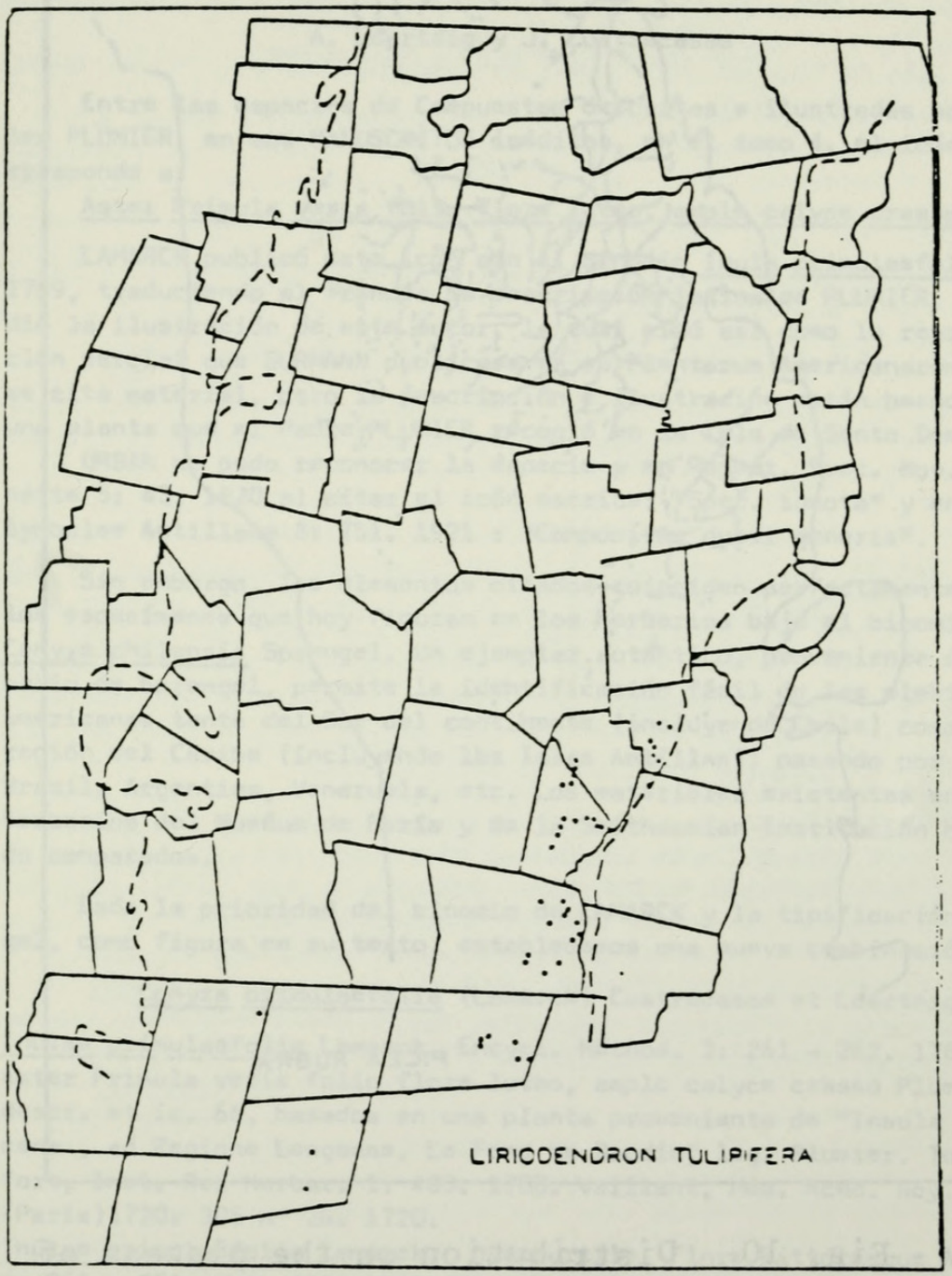

Fig. 9 Distribution on the plateau of Liriodendron tulipifera.

Fig. 10 Distribution on the plateau of Picea rubra. In this plate, a solid line indicates a route along which the species is one of the most important components of the vegetation; a broken line indicates a route along which it is of very high frequency, though of low density. This type of representation, including the use of dots, greatly exaggerates the importance of the species in areas where it is local in occurrence.