

There is one possible explanation for the greater diameter and height growth on the unthinned area. This lies in the fact that the original stands on all three plots were a mixture of loblolly and shortleaf pines. On every plot the loblollies were on the average larger, both in height and diameter, than the average shortleaf. As a natural result of this superiority in size the loblolly was favored in the thinning, and far greater proportions of loblolly pine were left than of shortleaf. Now it is a well known fact that loblolly pine makes very fast growth on old fields during the first few years of its life, while later on this growth may slacken off abruptly when the roots of the growing trees have gone deeper than the cultivated soil and reach the far less moist sub-soil. Shortleaf pine, on the other hand, is characteristic of rather dry soils, and maintains its growth very well up to thirty or more years. It is possible, therefore, that the loblolly pine in the mixed stands on the Mayes plots had about "shot its bow", and that the shortleaf would have come into its own with the passing years. If this is so, then the heavy thinning of the shortleaf at the expense of the loblolly had just the opposite effect from that which was desired, and the tree which was most likely to make good growth from that time on was discriminated against in the thinning. A comparison of the growth of the two kinds of trees in the last five