

SIMPLIFIED TREE INVENTORY COUNTING FRAME

E. J. Eliason, Superintendent of Nurseries,
New York State Conservation Department, Albany, N. Y.

An open-end counting frame has been devised at the Saratoga State Tree Nursery. Heretofore, a similar frame has been used to define the sample area for taking the tree inventory in the nursery seedbeds. The older frame was completely enclosed, which meant that it had to be pushed down into the trees from the top to reach the ground. This was often difficult and consumed time to properly separate the tree stems that should go either in or out of the frame. The frames are made so that the inside length is the linear distance wanted; therefore, tree stems should fall in or out in relation to this inner edge. The new frame with an open end permits it to be applied from the side by sliding it through the seedlings at ground level (fig. 1). This works faster, and the sharper points differentiate the in and out tree stems automatically.

To support the open end and to serve as a handle, one wicketlike arch is attached about two-thirds of the distance from the closed end. This arch should be high enough to clear the normal heights of nursery trees.

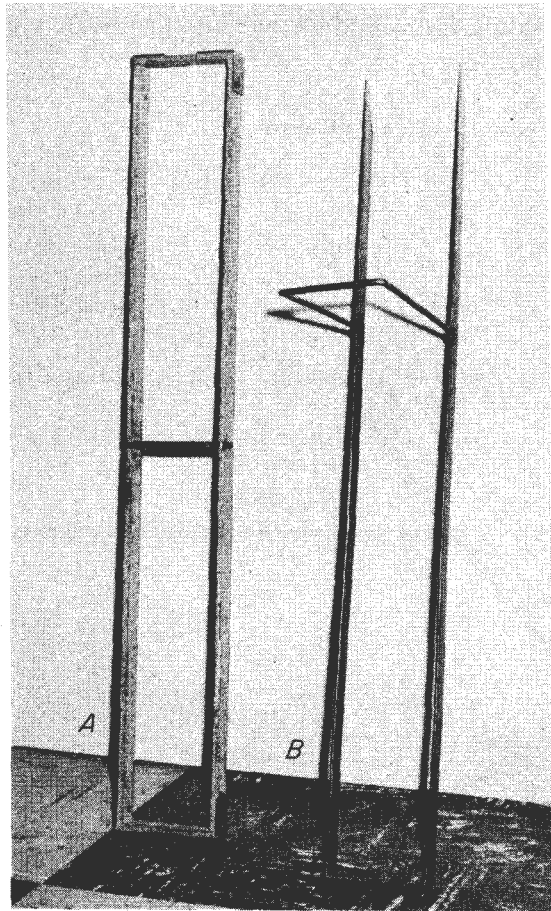


Figure 1.--Inventory counting frame: A, Old style, closed ends, made of wood reinforced with metal at corners; B, new style, open-end, made of aluminum bar, 6 inches wide, inside measurement, and 48 inches long.

Material for the frame should be light in weight and rigid. Wood can be used but should be reinforced with metal at the corners. The frame constructed of bar aluminum seems satisfactory. The aluminum material is one-quarter of an inch thick and one and one-quarter inches wide. The frame must hold firmly to the wanted inside distance, since any material deviation will affect the tree count. In using this frame, or one similar, this measurement should be checked frequently for possible adjustment.

This improvement, like many others, is the work of several people. The need for a better frame seems evident after years of experience with the older one. Those contributing were Elmer Terrell, forester, and Richard E. Wilson and Gerald Hughes, nurserymen, Saratoga Nursery. Messrs. Wilson and Hughes received \$100 from the Merit Award Board of the State Department of Civil Service for this suggestion. This amount was based on the fact that the frame will save State nurseries about \$1,000 a year.

This frame may have other applications where a quadrat or other sampling is taken, such as on a range survey, or on tree reproduction or other ground cover studies.