

THE MORRIS HIGH-PRUNING EQUIPMENT¹

New Zealand Forest Service

Equipment

The major components of the Morris high-pruning equipment are a 21-pound, 15-footlong ladder, a 3-pound platform, and a 4-pound elevator (fig. 1).

The ladder has ample strength under a vertical load, but it is not designed to permit bending stress to the side.

The platform is used when branches not accessible from the ladder must be pruned. It is self-locking on the trunk and does not damage young light-barked species.

The elevator has two purposes. It supports the operator when he is raising or lowering the ladder, and it supports the ladder when it is in a raised position. It is fixed to the tree in the same manner as the platform; however, it must not be used as a pruning platform.

¹ This article has been adapted from New Zealand Forest Service. The Morris high-pruning equipment. 1963 Information Series 49. 16 pp., illus. The equipment described should have practical application for use in collecting tree seed and other tree improvement work.

Use of this equipment frees the operator from the task of carrying cumbersome length



Figure 1.--Overall view of the Morris high-pruning equipment. (Courtesy of New Zealand Forest Service.)

of ladder between trees. It should enable the average operator to maintain a high output of good-quality pruning without undue strain on himself or his equipment.

Operation

The operator hooks the elevator and saw to the ladder and places it vertically against the tree to be pruned. He then loops the safetybelt rope around both the ladder and tree and fastens the clip.

As the operator mounts the ladder, he holds the rope of the safety belt firmly in both hands. At this point, the ladder is not attached to the tree but is held in position by the weight of the operator, which is braced against the safety belt. On reaching the top of the ladder, the operator loops the ladder chain or belt around the trunk and fastens it firmly. The elevator is next unhooked from the ladder and attached to the tree by a webbing strap.

Leaning back against the safety belt, the operator prunes the branches on the left and right sides of the trunk that are within reach from the ladder (fig. 2). The back and front ones are pruned from the platform, which he attaches to the tree at the most suitable locations.

In the next step the operator returns to the ladder, releases the platform and hooks it onto the belt, releases the ladder chain, and steps into elevator footrests. He then raises the ladder to the desired height and engages the appropriate rung in the elevator hooks. Finally, he climbs the ladder and continues pruning.

Descent

The operator detaches the platform, hooks it to the belt, and unfastens the ladder belt. He descends to the elevator, and while standing on it, he unhooks and lowers the ladder to the ground.

Then the operator -steps onto the ladder, releases the elevator from the tree and hooks to ladder, and returns to the ground (fig. 3).

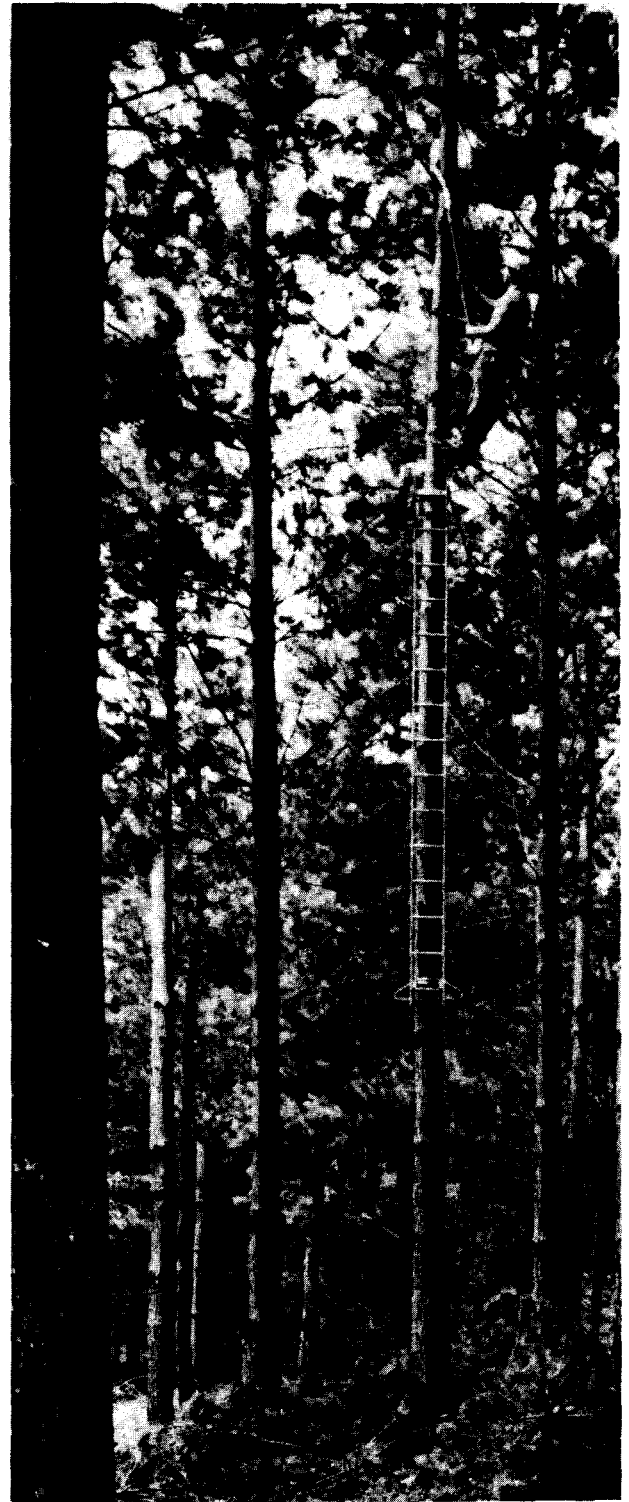


Figure 2.--Operator uses Morris high-pruning equipment while standing on ladder. (Courtesy of New Zealand Forest Service)

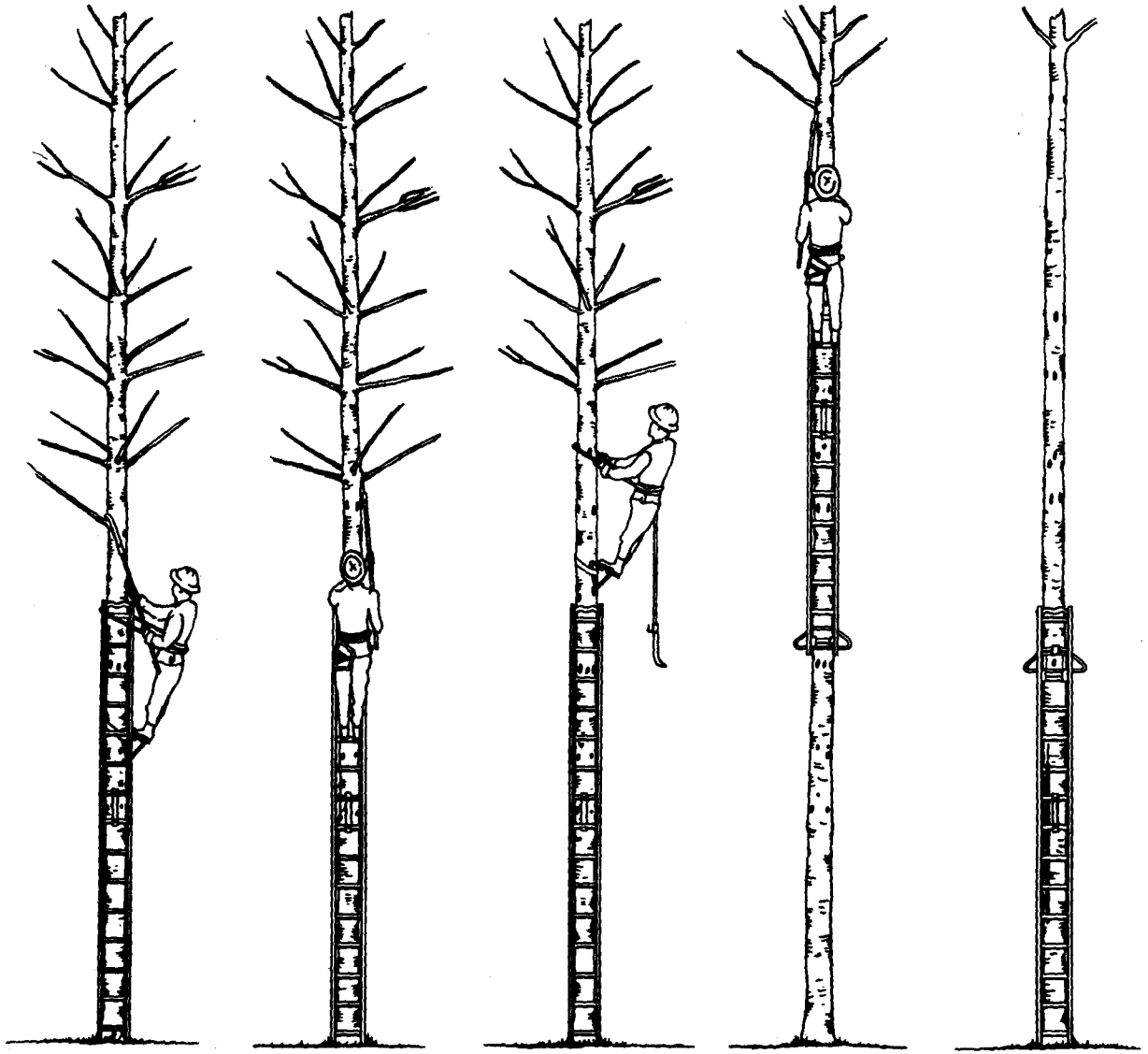


Figure 3.--Diagram illustrating use of The Morris high-pruning equipment.
(Courtesy of New Zealand Forest Service)