PLANTING STOCK DROPPED BY AIR

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In the spring of 1953 a test was made by the Ontario Department of Lands and Forests to determine the feasibility of air delivery of trees packaged in bales. Burlap covered bales were prepared at the Kemptville Nursery, 1·6 inches in diameter to allow dropping through the camera hatch of departmental aircraft.

Over 10, 000 baled trees were dropped by 3 methods: by using 8- and 11-foot parachutes (figure 1), and by free-dropping (figure 2). In addition baled trees were transported by boat and packed overland to the planting site. These trees were to be used as a "control" planting to compare their survival with that of the trees dropped from the aircraft.

The planting site was laid out in the form of a grid with 16 square plots. The three types of air delivery and the "control" delivery were each assigned 4 plots at random.

To date there is no significant difference in survival of the trees delivered by the different methods.

Free-dropping is better than parachute dropping because it is more accurate and eliminates the cumbersome and apparently unnecessary parachute. Parachutes frequently get caught on trees and are hard to recover. Flying time was reduced to a minimum when parachute handling and fastening of static lines was eliminated.

Figure 1. - Bale and parachute.

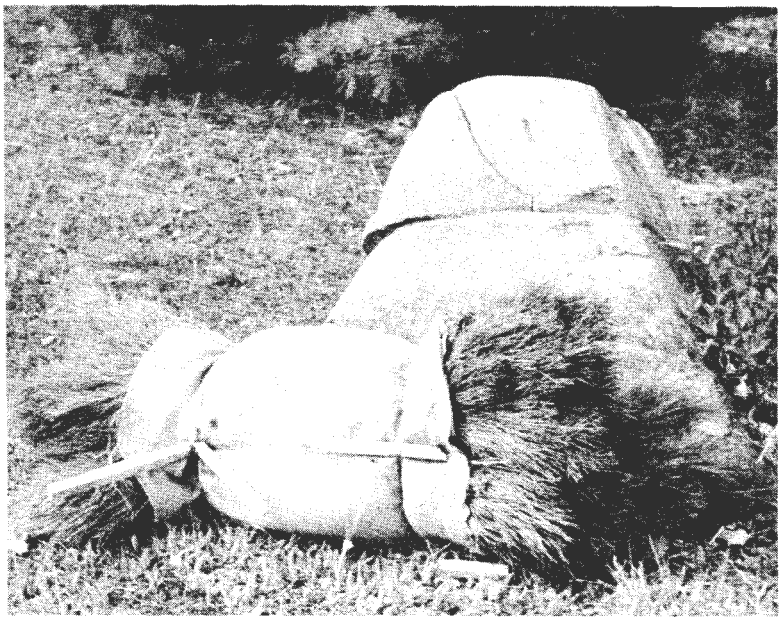

Figure 2. - Free-drop bale in final resting place after hitting base of large stump, bouncing 30 feet in the air, and crashing into rock in background. No trees were broken; almost every tree grew.