PLANTING RATES INCREASED IN BRITISH COLUMBIA WITH NEW PLANTING GUN AND BULLETS

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The latest Walters' gun (1, 2, 3) helped reforestation crews establish new productivity records during trials near Cowichan Lake on Vancouver Island, B.C., this spring. A 6-man crew employed by Pacific Logging Co. Ltd., Victoria, B.C., planted 35,000 bullet seedlings during a 2-day trial, an average of 2,390 seedlings a day for each planter (fig. 1). On the second day, they averaged 2,625 trees, setting the highest planting rate recorded on the British Columbia Coast.

Spacing was 8 by 12 ft. on a logged and burned site. Slopes on the site ranged from 0 to 35 percent. There were occasional patches of unburned slash. The planting crew worked an 8-hour day and were paid a basic wage, plus an incentive bonus. The bullet seedlings were 1-year-old fir supplied by Pelton Reforestation Co. Ltd., Haney, B.C. The 1-year-old fir and hemlock (fig. 2) were grown by the Canadian Forestry Service, Victoria, B.C.

The gun is the latest designed and produced by Jack Walters and his assistant of the University of British Columbia research forest, Haney, B.C., for planting bullet seedlings. It is made of aluminum and steel and weighs 8 lbs. Mechanical problems associated with earlier models were avoided by using fewer moving parts, and by using single bullets, rather than strips of 12 bullets.

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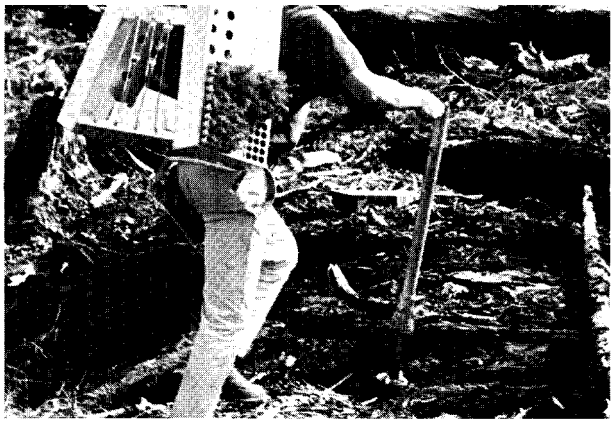

Figure 1.—A bullet planter in action on site.

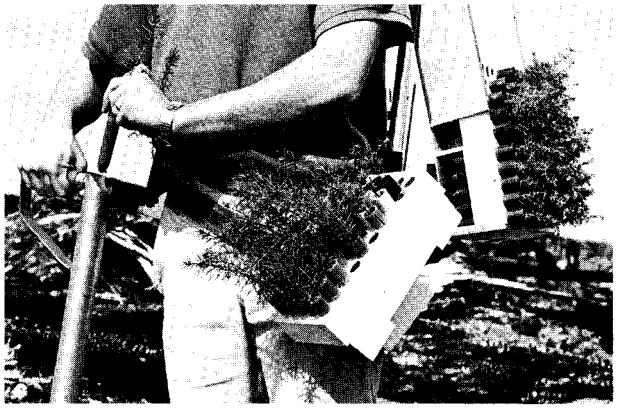

Figure 2.—One-year-old bullet seedlings, trays, and backpack.

The aluminum backpack developed by Mike Crown, forester with Pacific Logging Co., and Jack Walters, is based on the gravity feed principle. Designed to carry 400 trees, it allows easy access to plastic trays holding 50 seedlings each. Empty trays are returned to the centre of the pack for storage and reuse. The entire load including the gun, weighs 50 pounds. The trays, backpack, and method of loading the planting gun are shown in figure 2.

With some equipment modification, higher production rates can be expected on similar sites especially when planting crews become more accustomed to this reforestation system.

Further production trials on the Coast will be conducted later this year by Pacific Logging Co., the Canadian Forestry Service, and in the interior by the British Columbia Forest Service.

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