Operational Trials With C & H Tree Planter

Officer i/c: Gregg Cousens
Location: Paul Fire vic. Burns Lake
Region/District or Nursery: Prince Rupert/Burns Lake
Objective: To determine the effectiveness of the C&H Tree Planter on a typical interior rolling glacial till site.

Progress: Part I - The Cazes and Heppner (C & H) treeplanting machine was operated in combination with a D 7 Caterpillar Tractor and the C & H Scarification Plow, to plant a total of 35,500 bareroot spruce and pine seedlings on 20.4 ha in the Paul Fire near Burns Lake, B.C. On the four blocks of easy planting terrain:
- little or no slash, stumps, slope, stone, or rock, and fair to medium duff.
- the machine combination, operated by a cat driver and two alternating planters, achieved an average production of 545 trees per hour (4,360 trees per 8 hour day) with an efficiency factor of 60%. As block shape (very long and narrow) enhanced production, more regularly shaped areas of easy to medium planting difficulty could be expected to reduce production to approximately 475 trees per hour (3800 per 8 hour day). Average total planting cost was 20¢ per tree ($252.00 per hectare) at 1980 prices. Could be lower on larger project.

Part II - Regeneration performance plots were established in a total of three locations in two of the blocks and re-assessed after one year and two years growth. No noticeable difference in survival between machine (85%) and hand planting (86%), although more machine planted trees (23%) were classified in poor condition than hand planted (3%). This was due to washing out in planting trenches having slight slope, as well as browsing in trenches - i.e. easy pathways for moose.

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