Brushing Trends in the Prince George Forest Region from 1988 to 1998

by Susan Hoyles

Background

The purpose of this extension note is to provide a summary of hectares brushed on SBFEP and backlog sites, by the ministry in the Prince George Forest Region from 1988 to 1998. The data has been gathered from the Ministry of Forests Integrated Silviculture Information System (ISIS).

Various government funding levels and programs have influenced the amount of brushing accomplished, and the methods used, over the years. This is demonstrated in the regional summary for both manual (Figure 2) and chemical (Figure 3) brushing activities. From 1985 to 1991 FRDA I, a joint Canada — British Columbia funding program, entitled Forest Resource Development Agreement, provided funds to assist in the reduction of backlog. These funds were used to rehabilitate NSR areas and bring them back into a productive forest. All methods of brushing activities increased significantly during this time frame. Chemical methods had the biggest increases.

In 1992 to 1993, Ministry of Forests SBFEP funds were used to achieve brushing goals with similar trends of activity continuing.

In 1994, Forest Renewal BC (FRBC) funds became available for brushing on backlog sites. One of the objectives of these funds was to provide employment to the forestry sector. Brushing methods that provided jobs were strongly encouraged and manual methods increased significantly. In 1994 and 1995, the Ministry of Forests administered these funds. Starting in 1996, and facing significantly reduced dollars, the administration of these funds changed to be jointly administered by Ministry of Forests, forest licensees and FRBC. The amount of brushing carried out by the ministry was declining significantly during this time period. By 1998, FRBC funds had completely replaced SBFEP funds, with most of the dollars now being spent by the licensees. Any ministry brushing activities would come from these FRBC funds.

The following graphs and tables present brushing information for the Prince George Forest Region and each of the eight forest districts. The data is presented in the following formats: summary of all brushing methods (Figure 1), summary of chemical brushing techniques (Figure 2), and a summary of manual brushing techniques (Figure 3).
**Total Brushing**

The following graphs summarize total hectares brushed for the Prince George Forest Region, and for each of the forest districts.

It is interesting to note a couple of brushing trends over the years. Sheep grazing as a vegetation management tool reached its peak during the early-to-mid 90s. The availability of suitable sites and the lack of financial resources have contributed to its declining use by the ministry in recent years. From 1988 to 1998, manual brushing has increased by approximately 80% and, from its height in 1990, chemical brushing has decreased by approximately 80%. The decline in chemical use has been influenced by many factors. These include a reduction in areas that need treatment, social pressures, and a more pro-active approach to vegetation management problems.
Sheep grazing on a site in the Prince George District.
**Manual Brushing**

The following graphs summarize manual brushing for the Prince George Forest Region and for the forest districts. The graphs show the different types of manual techniques that have been used from 1988 to 1998. As mentioned earlier, manual treatments have increased by 80% since 1988. FRBC funding has influenced the upward trend of manual treatments.
**Figure 2f.** Fort St. James District – Manual Brushing 1988-1998

**Figure 2g.** Vanderhoof District – Manual Brushing 1988-1998

**Figure 2h.** Prince George District – Manual Brushing 1988-1998

**Figure 2i.** Robson Valley District – Manual Brushing 1988-1998

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**LEGEND**

- POWER — power saw
- BRUSH — brush saw
- MANCT — manual cutting
- MANGI — manual girdling
- HANDR — hand pulling (removal)
Chemical Brushing

The following graphs summarize chemical brushing for the Prince George Forest Region and for each of the forest districts. The graphs show the different types of chemical techniques that have been used from 1988 to 1998. It is interesting to note that the amount of chemical back-pack treatments have significantly decreased from the late 80s. As mentioned earlier, total chemical treatments have declined by 80% throughout the region. Some districts have gone through periods of time where they have not used herbicides for brushing treatments. Factors include First Nations and community environmental concerns, need, and weather related constraints.

Figure 3a. Total Prince George Region – Chemical Brushing 1988-1998

Figure 3b. Fort Nelson District – Chemical Brushing 1988-1998

Figure 3c. Fort St John District – Chemical Brushing 1988-1998

Figure 3d. Dawson Creek District – Chemical Brushing 1988-1998

Figure 3e. Mackenzie District – Chemical Brushing 1988-1998
LEGEND

CA — chemical air
CG — chemical ground
HELI — helicopter
FIXED — fixed wing
BPACK — back-pack
OTHER - STUMP — stump treatment
SINJE — stem injection
FRILL — notch-frill individual tree
BASL — basal spray

Figure 3f. Fort St. James District - Chemical Brushing 1988-1998

Figure 3g. Vanderhoof District - Chemical Brushing 1988-1998

Figure 3h. Prince George District - Chemical Brushing 1988-1998

Figure 3i. Robson Valley District - Chemical Brushing 1988-1998
Cutblock in Fort Nelson District, eight years after chemical backpack treatment with Vision (glyphosate).

For further information
Susan Hoyles, Silviculture Vegetation Officer, Ministry of Forests
5th Floor, 1011 - 4th Avenue, Prince George, BC V2L 3H9
Telephone: (250) 565-6100 Fax: (250) 565-4349
e-mail: Susan.Hoyles@gems7.gov.bc.ca