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PEST REPORT

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March 23, 1976.

SPRUCE BEETLE,

PRINCE RUPERT FOREST DISTRICT

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British Columbia Forest Service personnel reported a spruce beetle, *Dendroctonus rufipennis*, infestation 4 miles east of the Smithers Landing road, northeast of Tanglechain Lake on Timber Sale F95 045 between blocks 3 and 4. Helicopter and ground surveys by Pacific Forest Research Centre rangers on March 18, 1976 confirmed the presence of the pest. A group of 15 attacked white spruce trees was recorded, however there could be additional infested trees, for deep snow prevented a thorough search. Although there is no recent excessive windthrow or slash in the area, other conditions for beetle population build-up exist, for the trees are located on a good site in a creek bottom, and are mature.

During the past two years Sitka spruce was attacked on some 50 acres north of Kitwanga Lake and a small number of white spruce were infested north of the Bell-Irving River near Snowbank Creek. In both instances, trees had been weakened and predisposed to attack, the first by flooding and the latter by right-of-way cutting.

All known outbreaks of this beetle in British Columbia have been confined to mature spruce and were preceded by one or more years of heavy windthrow and/or excessive slash accumulation. However, given the right sequence of hot, dry years, outbreaks can develop in mature stands without an abnormal accumulation of downed host material.

The spruce beetle in the Prince Rupert District normally has a two-year life cycle, i.e., the insect overwinters twice, and new adults must overwinter before they attack. The spruce beetles near Tanglechain Lake are in the larval stage and therefore will not attack until late spring of 1977. On the other hand it is likely that there are additional patches of currently attacked trees in the Prince Rupert Forest District, which calls for increased vigilance in the mature spruce stands in 1976.