

MERG Report 1999-2 - Natural Vegetation Succession and Sustainable Reclamation at Yukon Mine and Mineral Exploration Sites

Laberge Environmental Services

Non-technical Summary

This report looks at ways to help make plants grow on land that has been mined or explored for minerals. Plants help to keep the soil from washing away, and they also provide food and shelter for wildlife. Up until now, mostly grasses have been planted on old Yukon mine sites. We are now also trying to learn the best ways to get shrubs and trees to grow in these areas.

New mining regulations in the Yukon are reviewed in this report. We explain what mining companies must now do to repair damage to the land after they have finished mining or exploring for minerals.

We describe the different kinds of soils found at Yukon mines. Plants will not grow on soils that have too much or too little water, have too little nutrients, have too steep a slope, or are too cold. Some shrubs grow best in dry, windy areas, while others grow only in wet places. Shrubs that normally grow only where there is shade are not good for planting in areas where all the trees have been removed.

The best shrubs for planting on mine sites are the ones that can be found growing nearby. Some Yukon shrubs, especially willows, can easily be started by taking the stems or roots from willows in the late winter or early spring, and then planting these cuttings in the disturbed soil at the mine site. Others, such as birch or alders, are best started from seed collected in the fall and then planted the next spring.

Some Yukon trees and shrubs are easily grown on land that has been disturbed by mining. Others, normally found only in older forests, do not grow well in the open areas around mine sites. At the end of this report, we look at 23 different kinds of Yukon shrubs and discuss how useful they may be for planting at Yukon mine sites. We also describe how each of these shrubs is best started, either from seeds or from cuttings.