



Lowbush Blueberry Fact Sheet

Developing Wild Blueberry Fields

Introduction

Once you have determined a piece of land to have good blueberry growing potential, it is then time to consider methods of development. It is important that the people involved are familiar with blueberry land development. Before any activity is undertaken, you must understand that naturally growing blueberries are present, and care must be taken to cause as little damage to the blueberry rhizome as possible.

Some of the major steps for development are as follows: (i) clearing; (ii) weed control; (iii) rock and stump removal, smoothing or leveling.

Clearing

Removing trees and debris from the property is usually the first step towards field development. As stated in the introduction, care must be taken to cause as little damage to the blueberry rhizome as possible. This may mean cutting the trees during the winter months while the ground is frozen or during a period when the ground will withstand some abuse.

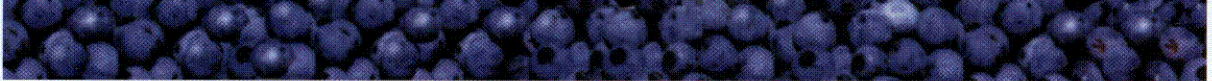
The best method for blueberry field development is clearing land by hand. The trees are cut with a power saw, as close to the ground as possible. They are then either limbed on site or skidded to the roadside.



Fig. 1: The process of clearing land.

It is best to completely remove the brush from the land. Even small branches and twigs can interfere with proper production and should be removed. If the brush has to be burned on site, piles should be made on field roads, rock piles, wet areas etc. If brush piles are burnt where berries exist, the heat from the fire can destroy blueberry rhizomes, creating bare ground. Also, the ash from the fire can change the chemical makeup of the soil. When conditions are suitable, brush could be cleared with an excavator equipped with the proper attachments.





If they have not already been established, you should define and develop field roads and fire-breaks. It should be determined at this time if the field will be divided. If the field is large enough (20 acres or more), you can split it up so that it produces a crop in alternating years. This will insure income every year and spread the workload.

The next step will depend upon how abundant the naturally occurring blueberry plants are, and the weed density and type.

Stump and Rock Removal, Smoothing or Leveling

It is recommended that you do not remove stumps from a field until at least 5 years from the time they were cut. If they are removed too soon, large amounts of soil will be removed with the roots. This soil will contain blueberry plants that have taken a long time to become established. The roots will decay allowing the above ground portion of the stump to be removed with limited disturbance to the soil.

An excavator is usually the equipment of choice for stump removal. At the same time, rock removal, leveling and open ditch construction can be done, if required.

The stumps should not be burned on the field, but should be removed from the field if possible. Other equipment can be used for this type of work, but care must be taken to cause as little damage to the blueberry rhizomes as possible. An excavator is capable of placing sod and lowering mounds, with limited damage. The tracked machine causes very little soil compaction but can smooth out the leveling job.



Fig. 2: An excavator removing rocks.

A blueberry field does not need to be completely flat. However, it should be smooth enough so that mechanical harvesters and flail mowers can travel over the land without difficulty.

It is very important that you, and the people hired, have an understanding of the blueberry plant. Development should be done in such a way as to assist the growth and not to set things back. This means correct timing and the use of proper equipment for the job. For example, leveling land when it is too dry can result in a poor recovery of the blueberry plants. Leveling when too wet, will increase cost and create depressions, resulting in a poor overall job.

The removal of stones and large stumps may require the need for filling holes. This can be done with sand or topsoil.





Weed Control

If the property has been recently cleared of dense forest, the blueberry plants will be sparse and delicate from the lack of sunlight. They will begin to spread and grow once the competition for light has been removed. It may be to your advantage to leave the field for 1 or 2 growing seasons and not treat it with a broadcast herbicide. As well, burning the field at this time may not be necessary or beneficial. Patience when developing a field is very important. It takes time for blueberry rhizomes to spread. Woody weeds can be spot treated during this waiting period.



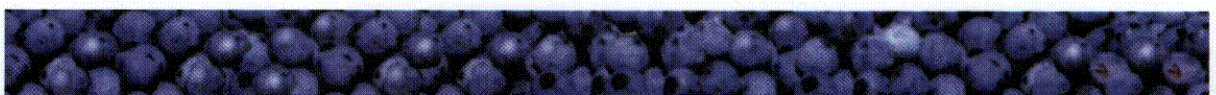
Fig. 3: Newly developed land.

Follow the Guide to Weed Control Publication ACC 1014, for proper timing and application. It is very important that proper weed control practices are followed. Erosion has become very serious to Nova Scotia Blueberry Growers. Areas where blueberries are not found in abundance should not be completely cleared of plant material, such as grass. These weeds help protect the ground from soil degradation.

Under Drainage

Some land may benefit from tile drainage. Draining the land may allow earlier access to the field in the spring. Plant spread and growth will improve, and pesticide applications can be made easier. Disease outbreaks like Monolinia Blight may be reduced.

Installing under drainage is very expensive and should be considered thoroughly before undertaken. Not all land that is drained will be improved.





Summary

One of the main things to remember when developing wild blueberry land, is that you are working with a native plant. The blueberry plant has become established on the land over many years. Developing means encouraging this naturally occurring plant and giving it a helping hand. Be patient and follow recommended practices and you should be rewarded for your efforts.

An important information resource are the many successful blueberry growers found throughout Nova Scotia, and the wild lowbush blueberry extension team of the Nova Scotia Department of Agriculture and Marketing.

For further information contact:

Dale W. McIsaac
Lowbush Blueberry Extension Specialist
Nova Scotia Department of Agriculture and Marketing
Nappan, NS B0L 1C0
Phone: (902) 667-8722

Andrew S. King
Manager, Nova Scotia Wild Blueberry Institute
Nova Scotia Department of Agriculture and Marketing
PO Box 550 Truro, NS B2N 5E3
Phone: (902) 893-7310

Prepared by:
Andrew S. King
Manager, Nova Scotia Wild Blueberry Institute
Nova Scotia Department of Agriculture and Marketing
PO Box 550 Truro, NS B2N 5E3
Phone: (902) 893-7310

April 2000

Partial funding for this factsheet was provided by Agricultural and Agri-Food Canada through Agri-Futures, Nova Scotia's Adaptation Council.

