

Nov
1983

Holland-Bradford Marsh

The Holland Marsh is perhaps the best known organic soil area in Ontario since it has been used for different purposes from the early days of settlement.

The Marsh is situated on the southern end of Lake Simcoe and was probably at one time a bay extension of an ancient lake called "Algonquin". It is also the point at which the Holland River enters the Lake.

Part of the Holland River serves as a drainage channel for farms in the southern end of the Marsh.

History

The history of this marsh is short as follows:

A glacial lake called Lake Algonquin covered the area about 10,000 years ago. The retreating glacier uncovered a lower outlet and at that time Lake Algonquin came to an end. The lake level dropped and left the Holland Marsh embayment dry.

An inland rock ridge in the north (bar) in the south, Lake Simcoe, itself existed as a separate lake by this time, expanded and flooded the land south of Cook's Bay.

This flooding caused swampy conditions and the accumulation of organic matter such as mud and peat in the Marsh.

The organic accumulation varies from a few centimeters to as much as 27 meters and is underlain by fine sand, silt or clay.

The Marsh, approximately 3 km in width, extends 24 km inland from Cook's Bay.

The western border of the Marsh is mainly Schomberg clay, silt and sand deposits, whereas the eastern border is mainly loess deposits (moulded mass of clay, sand, pebbles and boulders deposited by glaciers) with minor areas of Lake Algonquin sediments.

Drainage Schemes

Some 2000 ha (7200 acres) south and west of Highway 11 have been incorporated in the Holland Marsh Drainage Scheme constructed as diked areas under the Municipal Drainage Act in the period 1925 to 1930.

Areas to the north of Highway 11 on each side of the river were developed later by private enterprise or individuals. Approximately nine or ten separate drainage

schemes have added another 1000 ha (2400 acres) of vegetable producing soil which is mainly between Highway 11 and Cook's Bay, with in the Cookstown area and some south-east of Alliston.

About 800 ha (2000 acres) of the remaining peat and mud area have been or are being acquired by the Ontario Ministry of Natural Resources for a wildlife preservation area.

The scheme for draining the Marsh was promoted by Mr. W.H. Day, Professor of Physics at the Ontario Agricultural College, Guelph, to address a group of interested people on marsh drainage in December 1909.

Until this time, the area was only known as a "muck ditch" swimming with bullfrogs and water snakes — so John Galt, an agent for the Canada Company described it in 1825.



Left photo: The four people holding the Dutch place are, from left to right: Carey, Roy, of Oak + Maple (Bradford); Chris Wilson, managing Page Clark Public Relations Inc., Mark Lee, Senior Muck Crop specialist at the Muck Research Station, Galt's operator, "the smallest muck crop producer in the world", and Margaret Anne Esant, wife of Page Clark Public Relations Inc.

Right photo: Mark is smiling because he has Bradford carrots in his hand. On the left is lady Mrs. Mary Ruth McDonald, Past Manager of the Muck Research Station, and the Honourable George W. Taylor M.C., Minister, Council of Ontario.

Professor Day tested the soil and became enthusiastic about the possibilities of growing vegetables on it and actively promoted the scheme to drain all of the area. The implementation of the project was slowed by years of political manoeuvring and the economic hardships of World War I, but in 1930, the Project was completed.

In 1930, Professor Day also reported a profit of \$27,000 on his first crop of 15 ha (37 acres) of vegetables.

In 1931, some Dutch settlers had come to the Marsh and by their industrious labours had achieved greater success than most. The Canadian reprint (native of the Netherlands Emigration Foundation, Mr. J.J. Spon gave a grant here for the rehabilitation of Dutch

immigrants who had failed elsewhere in Ontario.

In 1934, eighteen Dutch families on relief were moved to this location from Toronto-Hamilton area. Each family received \$600.00 (to be shared equally by the federal, provincial and municipal governments). The sum of \$475.00 was to be repaid eventually by each family. The Dutch government contributed the 5700.00 portion which was due by the municipality, when it was unable to produce this amount.

These eighteen original families formed the nucleus of the first settlement in the Marsh and it was and still is called "Annoerfeldt". After the war, more immigrants from the Netherlands came to settle here as well as people from practically every country in Europe.

There are large groups of

use them wisely.

Organic soils are one of many irreplaceable Canadian natural resources. These soils were formed by nature under conditions of poor drainage and flooding. Their formation takes place where plant materials (woods, sedges, cattails, bullrushes, mosses, shrubs, trees) gradually decompose but accumulate faster than the natural processes of decay are able to proceed.

It takes nature about 500 years to produce 30 cm (one foot) of organic soil. However, as soon as organic soils are drained and reclaimed from nature's water bound grasp, the undeniable fact is, that these soils start to disappear.

This disappearance or subsidence, the gradual loss of surface elevation, has been a chronic problem wherever organic soils have been reclaimed for agriculture. It is a natural process which cannot be stopped if these soils continue to be used to grow crops. The rate of subsidence for average conditions varies from

Commodity	Average
Carrots	2775
Onions	3913
Lettuce	1687
Potatoes	792
Celery	675
Parsnips	163
Cabbage	101
Cauliflower	221
Beets	48
Misc. Crops	343
Acre	8858
Hectares	3501

Miscellaneous Crops

They are steadily growing, especially for the Toronto specialty market. The above figures include radish, asparagus, endive, aroniac, romaine, dandelion, mustard, onion

Commodity	1954 Average
Carrots	1387
Onions	1423
Lettuce	1633
Potatoes	1284
Celery	647
Parsnips	0
Cabbage	91
Cauliflower	111
Beets	48
Misc. Crops	42
Acre	5738
Hectares	2775

Hungarian, German, Polish, Czechoslovakian, Ukrainian and Italian immigrants as well as Portuguese, Chinese and Japanese newcomers making their living from growing Marsh vegetables.

Organic Soils —

A Disappearing Resource

An organic soil such as the one in the Holland-Bradford Marsh is usually called on a peat or a muck soil. It is estimated that Canada has approximately 1.3 million km² (500,000 square miles) of organic soils in other words, for every 7 ha (17 acres) of mineral soil, there is one ha (2.47 acres) of organic soil in Canada.

In recent years Canadians are becoming much more aware of the needs to take stock of Canada's resources and to