BUREAU OF MINES

MINES AND GEOLOGY BRANCH

DEPARTMENT OF MINES AND RESOURCES

OTTAWA, CANADA

THE PEAT MOSS INDUSTRY IN CANADA

by

A. A. Swinnerton

Contents

Illustrations

Memorandum Series
No. 90
February, 1946.

THE PEAT MOSS INDUSTRY IN CANADA

INTRODUCTION

This report describes operations at the various properties that are producing peat moss in Canada. It is intended to supplement previous reports in this series * which listed and described the deposits of peat moss that have been found in Canada.

Peat moss is the name used in the trade for dead sphagnum moss that has been excavated from peat bogs, dried, shredded, and pressed into bales or smaller packages. Peat moss is fibrous, elastic, light in colour, and possesses the valuable property of being able to absorb and hold up to 25 times its own weight of liquids and gases. Its main uses are for stable bedding and poultry litter, for soil conditioning, and as a filler for commercial fertilizers. It is also used as an insulating and packing material.

The value of peat moss has long been recognized in Europe where it is widely used. Relatively little peat moss is used in Canada, however, in spite of the occurrence of deposits comparable with the largest in Europe. In the United States its value is being increasingly recognized, and the quantity imported from Europe increased from 5,000 tons in 1924 to 78,000 tons in 1939. When supplies from Europe were cut off as a result of the war, active attention was given to the development of deposits in Canada with the result that, in 1944, over 60,000 tons were produced, most of which was exported to the United States.

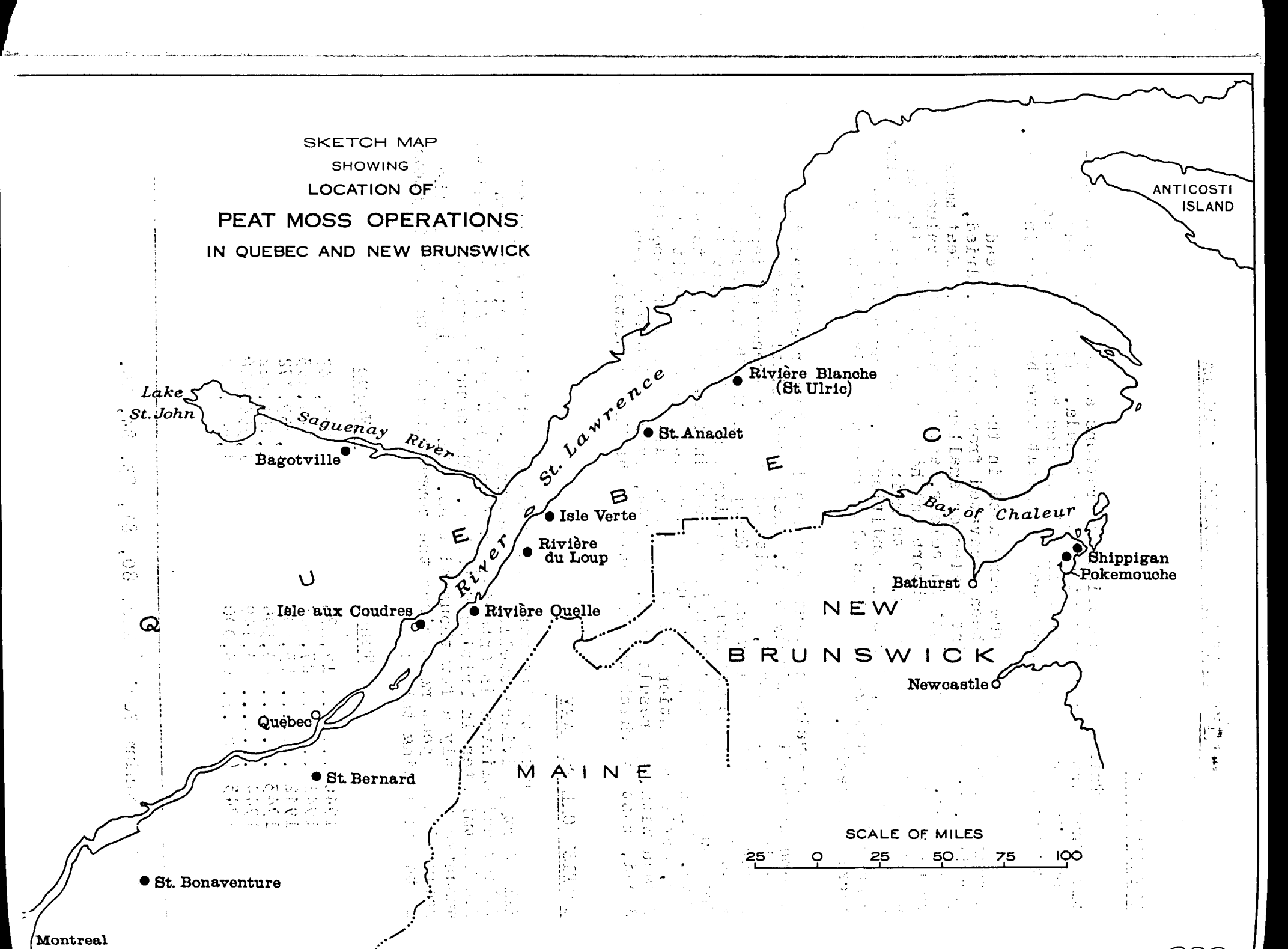
STATISTICAL SUMMARY

Prior to the war, peat moss was obtained from bogs at Isle Verte, Riviere Ouelle, and Waterville in Quebec; at Grand Valley and Clinton in Ontario; at Edmonton West in Alberta; and at New Westminster in British Columbia. The annual production amounted to only a few thousand tons. The rapid increase in the production of peat moss since the commencement of the war is shown in the following table:

	Tons	$ Value
1940	17,186	282,543
1941	27,803	644,253
1942	53,506	1,069,372
1943	63,506	1,461,422
1944	63,149	1,554,606
1945 (est.).	63,000	1,500,000

---

* Memorandum Series Nos. 80, 81, 83, 84, 86.


SKETCH MAP
SHOWING
LOCATION OF
PEAT MOSS OPERATIONS
IN QUEBEC AND NEW BRUNSWICK
ANTICOSTI ISLAND
Lake St. John
Saguenay River
Bagotville
River St. Lawrence
Rivière Blanche (St. Ulric)
St. Anaclet
Isle Verte
Rivière du Loup
Isle aux Coudres
Rivière Quelle
Québec
St. Bernard
St. Bonaventure
Montreal
QUEBEC
MAINE
Bay of Chaleur
Bathurst
Shippigan
Pokemouche
NEW BRUNSWICK
Newcastle
SCALE OF MILES
25 0 25 50 75 100

In 1944, peat moss was produced at thirty-two plants in New Brunswick, Quebec, Ontario, Manitoba, and British Columbia, the three leading producers being British Columbia (46 per cent); Ontario (20 per cent); and Quebec (30 per cent). Fifty per cent of the production was sold for poultry and stable litter, and thirty-five per cent for horticultural use. The remainder was used chiefly as insulation material. The capital employed in this industry was reported as being just under two and a half million dollars, and the amount distributed as wages and salaries was just over one million dollars.

DESCRIPTION OF OPERATIONS

NEW BRUNSWICK

In New Brunswick there are two main areas where deposits of peat moss occur, (1) on the South Shore between St. Stephen and the city of Saint John and (2) in Northumberland and Gloucester counties on both shores of Miramichi Bay, and on Miscou and Shippigan islands.

The deposits on the South Shore are generally small and are difficult of access, but those in the northern part of the Province are extensive and of very good quality, and compare favourably with European bogs that produce peat on a large scale. The location of peat moss operations in New Brunswick and Quebec are shown in the sketch map, Fig. 1.

Only two companies, however, are engaged in peat production, namely, Fafard Peat Moss Company at Pokemouche, and Western Peat Company at Shippigan. Their total production in 1944 was just under 2,000 tons.

Fafard Peat Moss Company

This company, which started operations in 1943, is engaged in developing the Pokemouche bog.

This bog is situated 4 miles southwest of the village of Shippigan, between Pokemouche gully and St. Simon inlet. The Canadian National Railway and New Brunswick Highway No. 7 cross the deposit lengthwise. The surface of the bog is fairly level, with a slight rise toward the southwest end. It has an area of 500 acres with more than 5 feet of moss, and an estimated total content of 7 million cubic yards of peat moss on the basis of a 20% moisture content. The moss is of very good quality, light in colour and weight, and only slightly humified, with an absorptive value of 23, and an ash content of 5.5% on the dry basis.

The peat, after being excavated, is dried on the ground and on racks, then taken to the storage shed which is connected by a conveyor, 800 feet long, to the shredding and baling plant. The storage shed and baling plant are separated because of fire risk. The shredding plant has one electrically operated press with a 25 bales per hour capacity and two hand presses with a 16 bales per hour capacity, and it is hoped to obtain two more

electrically operated presses. The peat moss is being packed in bales as the cardboard cartons hitherto used are not being manufactured. One striking feature at this bog is the storage of dried moss in large pyramids.

Western Peat Company

This company is engaged in developing the Shippigan peat moss bog at the northeasterly point of land of Gloucester county, about ½ mile from Shippigan station on the Canadian National Railway. It is a bog of the high moor type of wide expanse, free from obstructions, lakes, or spruce growth, and rises towards the centre to a large dome having moss 20 feet in depth. The peat moss is of exceptionally good quality, almost pure sphagnum with hardly any admixture of other plant remains. It is light in colour and weight, with an absorptive factor 35 and an ash content of 3.6% on the dry basis. The area of workable peat moss 5 feet or more in depth, is about 1300 acres, and the amount of moss has been estimated to be 20 million cubic yards or 1½ million tons on a 20% moisture basis.

In 1944 some 70 miles of drainage ditches were dug, including a main roadway 6,700 feet long and two lateral roads 5,000 feet long, as it is intended to work this bog by the method used in the Fraser Delta, British Columbia, namely, travelling conveyor belts feeding a main conveyor system. The foundations for the machine shop, shredding and baling plant, storage shed, and shipping room were also completed. It was hoped to reach a production of 50,000 bales in 1945, but the unusually wet summer was responsible for a smaller production than was expected.

QUEBEC

Before the late war small amounts of peat were obtained from bogs near Riviere Ouelle, Isle Verte, and Waterville, but as a result of the demand for peat moss in the United States considerable development has taken place in Quebec, chiefly in the Lower St. Lawrence region. In 1944 some 14,000 tons were produced by eleven operators. The bulk of the production, however, came from Premier Peat Company, Isle Verte, and Canada Peat Company, Riviere du Loup.

Louis Roy, Riviere Blanche

Mr. Roy and his son started developing the peat bog at Riviere Blanche in 1944. This bog which consists of high quality moss is half a mile south of the village of St. Ulric (also known as Riviere Blanche), is circular in shape, with an area of about 600 acres. It is of the high moor type, free of obstruction, and rises gradually to the east where the peat moss is reported to be nearly thirty feet thick.

In 1944, the main drainage ditch and some lateral ditches were dug and a small baling plant containing 4 hand presses was built in the village of St. Ulric. Owing to the difficulty of obtaining fibre board cartons, wooden slats are used for holding the bales. Production is small at present but is expected to increase.

Tourbière de Pointe-au-Père

This company is developing the St. Anaclet peat bog one mile south of Father Point near the village of St. Anaclet. The bog is a large one, with a length of over 7 miles and consists of two lobes connected by a long narrow strip of bog. The western lobe has an area of about 1 square mile and is estimated to contain about 325,000 tons of high grade moss. Samples taken in 1941 showed that the moss had an absorptive value of approximately 25 and an average ash content of about 4 per cent.

A storage shed and baling plant were built in 1943 and drainage work is still being carried on. The peat is hand dug and dried on chimneys and small stacks and taken to a storage shed in sleds drawn by a tractor. The present capacity of the mill with two hand presses is about 1 car a day and this could be doubled if more labour were available for cutting and stacking. Veneer is being used for baling material owing to a shortage of fibre board cartons. This company has experimented with a mechanical peat moss cutter. It consists of a series of knives mounted below the body of a small tractor and has been used successfully for removing top moss and bush.

Premier Peat Limited

This company is operating the Isle Verte peat bog. The bog was worked for peat moss for several years prior to 1939, producing insulating material and horticultural moss, but early in the war it was purchased by Premier Peat Limited which has developed it till it is now one of the largest producers in the province of Quebec.

The bog is on a river terrace one mile east of Isle Verte station on the Canadian National Railway. It has an area of about 500 acres, of which about one-third is workable for peat moss. The upper bed of the bog is sphagnum moss of very good quality, but light in colour, and is only slightly humified. It has an absorptive value of about 23 on the dry basis, and an ash content of 3%. The workings are well planned and well laid out. The dried moss is stored in open sheds and in stacks on the field and is transported to the main storage shed and baling mill by light railway in the summer and by tractor-drawn sleds in the winter when the snow is too deep for the railway to operate. The shipping and baling sheds were destroyed by fire in the spring of 1944, but 4 hand-operated presses were installed in the storage shed which gave a daily production of about 2 carloads. Poultry and horticultural moss are produced at this plant and are shipped in fibre board cartons and heavy paper containers.

Canada Peat Company
Perfect Peat Company

These companies are working the Riviere du Loup bog which is one of the largest in Quebec; it lies two miles south of the city of Riviere du Loup and is crossed by the main highway from Quebec to New Brunswick. The area has been estimated to be 7,000 acres, a large part of which is wooded, and the area containing peat moss is about 1,700 acres.

The sphagnum peat, which has a fairly thick cover of low bush, is about 6 feet thick. Below this level it becomes more humified and runs into fuel peat. In the upper levels it is light and of fair quality, with an absorptive value of about 15 on the dry basis.

Canada Peat Company, one of the largest producers in Quebec, operates on that part of the bog east of the main highway, and Perfect Peat Company on the western part. The general method of operation is the same. The excavated blocks are placed on racks as drying on the ground in piles or chimneys has not been found satisfactory owing to the shorter drying season in this area. The dried moss is taken by light railway to the mill storage shed. It is shredded first and then goes to storage and is carried by means of an air conveyor to the screens which separate it into the desired sizes. The fines are removed by a cyclone dust collector and are added to the horticultural moss. Perfect Peat Company started to operate in 1943 and expects to eventually have an output equal to that of Canada Peat Company.

Excel Peat Company

This company, which started operations in 1942, is developing the peat bog at Isle aux Coudres, an island in the St. Lawrence River about 60 miles below Quebec City. The property consists of approximately 600 acres of good quality moss with a thickness varying from 5 to 10 feet. The excavated peat is dried in piles in the usual way and is transported to the mill by "Snowmobiles" and trucks provided with caterpillar treads. Chicken litter and horticultural peat are produced. The peat has to be taken to the mainland by truck and ferry or by schooners to Baie St. Paul and rehandled there, which increases the transportation costs.

Saguenay Peat Moss Company Limited

This company operates on the Chicoutimi bog, which has an estimated area of 2,800 acres, and is 4 miles northwest of Bagotville on the Bagotville-Chicoutimi highway.

In 1943 a section at the south end was used for the small-scale manufacture of peat fuel, and in 1944 a small plant was built for baling the surface layer of floral moss that covers part of the bog. The surface growth was first removed with a bulldozer, and the floral moss was then loosened by dragging over it a large log with spikes set spirally along its length. The loosened moss was gathered up by hand and laid out to dry on racks, or tables, made of chicken wire. When dry it was taken to the baling shed and packed in 7-ply paper bags. In 1945 a deposit of peat moss some 200 acres in extent was discovered in the centre of the bog and a plant was built for processing the moss. It is reported that this plant was in operation for part of the year.

P. R. Murphy

Near St. Bernard, about 20 miles south of Quebec city, P. R. Murphy operates a peat moss property for the production of

floral and horticultural moss. The loose surface moss is raked by hand and then dried on racks made of ordinary chicken wire. When dry, the moss is taken to the storage shed where it is compressed in a hand baling machine and packed in seven-ply paper bags holding about 30 pounds of moss.

Clovis Bourque

At St. Marc des Carrieres Clovis Bourque operates a peat moss property for the production of floral moss. Here the moss is dried on the ground as well as on racks, and the product is baled in hand-operated hay balers.

Quebec Peat Moss Company

This company produces peat moss from the bog at St. Bonaventure. The deposit is somewhat unusual as humified peat overlies the moss. This humified layer is used for the production of peat fuel which is sold in the neighbouring villages.

Peat moss is also produced at Rivière Ouelle by the Tourbiere Rivière Ouelle, and at Waterville by Waterville Moss and Peat Mine.

ONTARIO

In 1944 six companies in Ontario produced 9,800 tons of moss, the two largest producers being Erie Peat Company, Welland, and Canadian Industries Limited, Erieau.

Erie Peat Company

This company is operating on the Welland bog in Wainfleet and Humberstone townships, some 5 miles west of the town of Port Colborne. It has an area of 3,500 acres, 2,700 of which are owned by Erie Peat Company. Of this 2,700 acres, 800 contain peat moss varying in thickness from 3 to 7 feet. This peat moss is mainly sphagnum, with an admixture of eriophorum and other grasses, is fairly light in colour, and resembles the deposit at Alfred.

The developed area is divided into drying fields 80 acres in area, separated by drains 2 to 4 feet deep. The peat is cut in the usual way with a cutter and the narrow European spade, stacked on the sides of the ditches, and after drying for 2 or 3 weeks is built in small piles. When fully dry the peat in these piles is loaded on to trucks and transferred to cars on the field railway. It is then taken direct to the mill or built up into large stacks 25 feet high, 20 feet wide, and up to 200 feet long, according to the operating requirements. On arrival at the mill it is elevated to the shredders, then passes over the screens and drops into bins above the presses. These presses are hydraulically operated and compress a load of 23 cubic feet into bales which are covered with Veneer sheets in place of burlap which is no longer obtainable. The main production at present is poultry litter.

Canadian Industries Limited

This company produces peat humus from the Rondeau, or Erieau bog, near Rondeau Bay on Lake Erie. The material is used as a filler in the manufacture of fertilizers and the deposit is worked by a somewhat unusual method. The surface is cleared of all growth. It is then harrowed and milled, and the loose fine peat is exposed to the sun and wind to dry out. The dried material is then raked off the surface, collected, and shipped to the factory.

Canadian Humus Products Registered

This company is operating the Westover bog in Beverly Township , Wentworth county, 17 miles from Hamilton. The surface is covered with low scrub and bushes and the deposit itself consists of a mixture of well humified woody and sedge peat, 4 to 5 feet thick, overlying a bed of limy marl 3 to 4 feet thick. This peat would have very little value under ordinary conditions, but mixed with the right proportion of limy marl it makes a soil conditioner with an appropriate mixture of humus and alkaline earths.

This deposit was originally owned by Beverley Holdings Corporation, but is now operated by Canadian Humus Products Registered who produce and sell the soil conditioner known as Hu-Mar.

The mixture of peat and underlying marl is excavated by steam shovel, loaded on to dump cars, and then hauled by light railway to the drying fields. It is then dumped, allowed to weather during the winter, and is spread out for drying. It is cultivated and harrowed to mix the material thoroughly, then screened and bagged, and trucked to the storage warehouse at Dundas.

Arctic Peat Moss Company

This company operates on the Arctic bog (also known as the Crozier bog), 9 miles southwest of Fort Frances. It has an area of about 600 acres and is accessible by a good road. The bog has been under development for several years and production was started in 1942. The peat moss stratum has a thickness of about 4 feet and is composed of sphagnum with a certain admixture of carex and aquatic plant residues. Analyses of samples taken in 1942 show an absorptive value varying from 12.2 to 14.2 (8.9 to 10.4 on the 25% moisture basis) and an ash content from 5.0 to 6.1%. The peat is dug in the usual way, dried on the field and on racks, and taken to the storage shed by a field railway. The baling shed was burned in 1945 with the destruction of all the equipment, but two hand-baling presses have been installed in a former storage shed and operations are proceeding on a reduced scale.

Polar Bear Peat Moss Products, Registered

This company operates the Polar Bear Bog, 6 miles north of Pinewood Station on the C. N. R. (about 12 miles east of Rainy River). The bog is reached by a good country road which extends through it northwards.

The deposit covers the larger part of four sections, with a depth ranging from 4 to 12 feet. The top 4 feet is fair quality moss, light brown, but it becomes somewhat more humified below this depth. Samples of the 4-foot stratum taken in 1942 gave an absorptive value varying from 12.9 to 15.8 on the dry basis (9.4 to 11.6 on the 25% moisture basis) and an ash content from 3.9% to 6.6%.

The peat is dried in piles, and is then transported on tractor-drawn iron sleds to the storage racks built alongside the main road. From these it is loaded by an elevator on to trucks and is hauled to the mill, which has been built in the village of Pinewood close to the railway station. This mill is a temporary construction as the main building was burned down last year,— a fate that seems to overtake nearly all peat plants in the course of time. A more permanent structure is to be built shortly, but it has not been decided whether to build the mill on the bog or in the village of Pinewood.

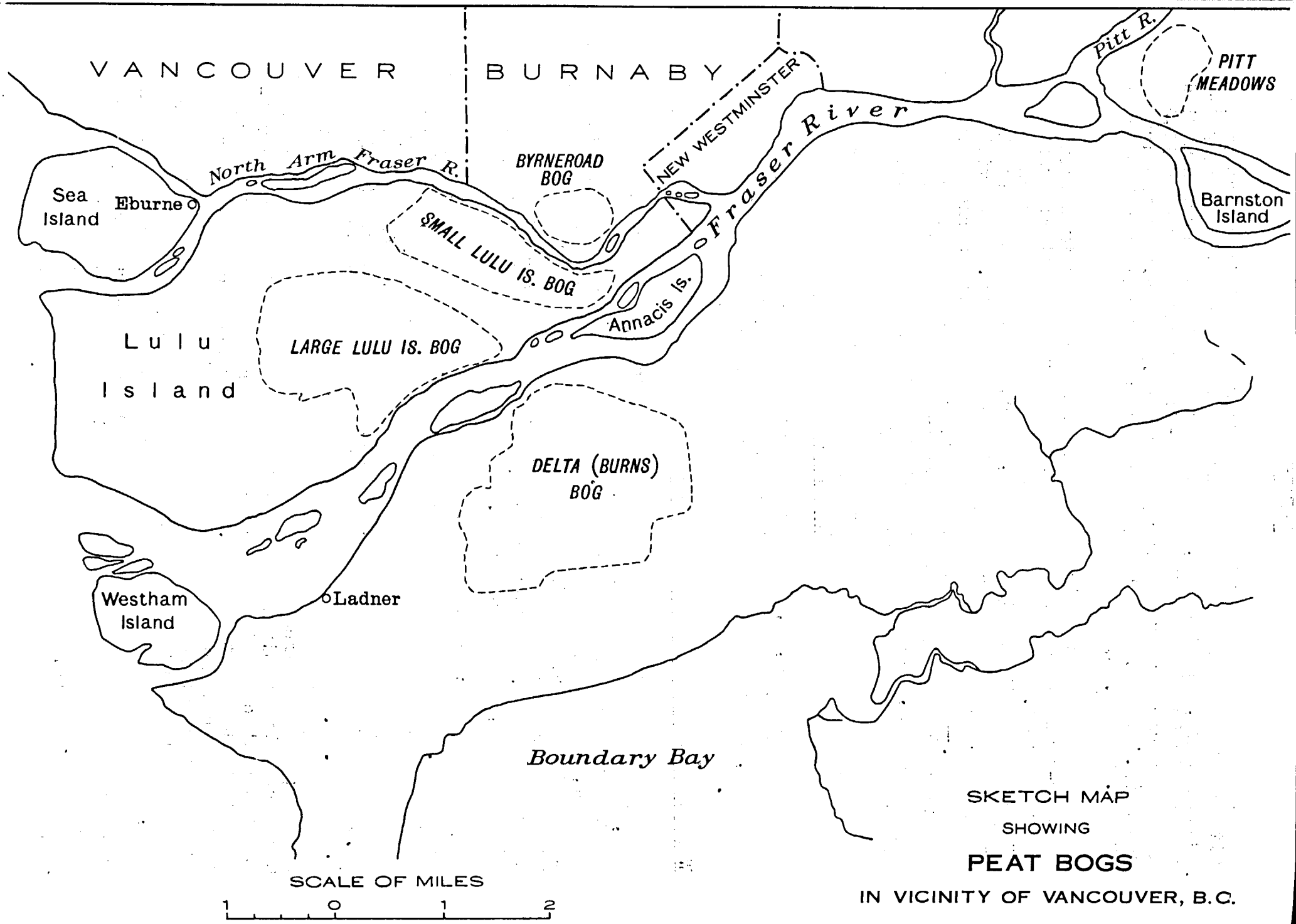
MANITOBA

In 1944, 1,460 tons of peat moss were produced. The main production came from the Julius or Shelley bog east of Winnipeg, but a small amount was produced from bogs near Lac du Bonnet.

Winnipeg Supply and Fuel Company

This company is operating on the Julius or Shelley Bog, 60 miles east of Winnipeg, near Shelley, on the main line of the Canadian Pacific Railway. Its total area is estimated to be 4,000 acres, but only about 600 acres is suitable for peat moss development. The Winnipeg Supply and Fuel Company has acquired the section north of the railway track, which covers about 500 acres, and McCabe Bros. Grain Company the section south of the track, about 120 acres.

The growth is chiefly sphagnum, with some carex towards the edges. The depth at the centre is about 15 feet, of which 10 feet is very good quality moss, light in colour, and only slightly humified. Analyses of samples taken in 1942 show an absorptive value of from 21.3 to 15.6 on the dry basis (15.7 to 11.4 on a 25% moisture basis) and an ash content varying from 4.9% to 6.9%. A bulldozer is used to remove the surface growth on the bog (this work is done in the spring when the bog is still frozen); and the excavation of the peat is done partly by hand and partly by machine. The machine used for cutting or excavating the peat consists of a caterpillar tractor with five circular knives mounted at the front. The peat is first cut into strips to the required depth and then cut into blocks by running the tractor at right angles to the original cut. A rake at the back of the tractor lifts the peat blocks and throws them off to the side, where they are subsequently piled by hand. After they have dried out they are taken to storage on tractor-drawn cars. From storage they are taken by belt conveyor to the shredding and baling mill which is equipped with high capacity balers operated by compressed air. The baling is done in the winter after the cutting and harvesting has been completed. In this way the work


VANCOUVER
BURNABY
NEW WESTMINSTER
Pitt R.
PITT MEADOWS
Fraser River
North Arm Fraser R.
BYRNEROAD BOG
Sea Island
Eburne
SMALL LULU IS. BOG
Barnston Island
Annacis Is.
Lulu Island
LARGE LULU IS. BOG
DELTA (BURNS) BOG
Westham Island
Ladner
Boundary Bay
SCALE OF MILES
1 0 1 2
SKETCH MAP
SHOWING
PEAT BOGS
IN VICINITY OF VANCOUVER, B.C.

is spread over the year.

McCabe Bros. Grain Company

The section of the bog south of the Canadian Pacific Railway main line is being operated by this Company. A certain amount of peat was cut during 1944 and was spread on the drying fields.

N. McMillan

A small amount of peat moss was produced by N. McMillan from bogs near Lac du Bonnet and was sold for poultry litter.

BRITISH-COLUMBIA

The largest scale peat operations in Canada are in the delta of Fraser River near New Westminster. From this small area elevan companies in 1944 produced 35,940 tons, which is more than half the total Canadian production in that year, the two largest producers being Western Peat Company Limited and Industrial Peat Limited.

The rainy season starts about the middle of September and consequently all the season's cut has to be harvested by that date. It cannot be left on the bog to freeze as is done in eastern Canada. As a result, mechanized methods have been developed for rapid harvesting of the dried peat. The peat is cut by hand in the winter, stacked alongside the ditches, and later built into piles to finish drying. Permanent conveyor systems or field railways run from the factory to the end of the bog and these are fed by portable conveyor belts which are loaded from the peat piles. These conveyor belts are then moved down the field as clearing proceeds, and given adequate labour. The whole season's cut can be harvested in about two weeks. This system was devised by E. E. Carncross of Western Peat Company and practically all the operators have adopted it. Two companies, however, have adopted other methods which will be described later.

Four bogs are under development at present, namely, Pitt Meadows, Byrne Road, Small Lulu Island, and Delta (or Burns), and their location is given in the accompanying sketch map, Fig. 2.

Pit Meadows

This bog is on the south bank of the Alouette River near its junction with the Pitt River, a tributary of the Fraser. It has an area of about 600 acres and has been worked for several years. The deposit consists of high grade moss, but drying conditions are not as favourable as they are lower down the valley. Alouette Peat Products Limited, the present operating company, produces poultry and horticultural moss and asparagus pads.

Byrne Road Bog

This bog lies on the north bank of the North Branch of Fraser River, close to New Westminster. It has an estimated

area of 700 acres of high grade moss. Four companies are operating on this deposit, namely, Excelsior Peat Limited, North American Peat Company, Coast Peat Company, and Byrne Road Peat Farm. The first three companies operate on the "Carncross" system , but the Byrne Road Peat Farm uses an entirely different method. Here the peat is first harrowed, then raked into windrows, and after four or five days drying on the field is loaded into cars, hauled to the storage shed, and finally baled. This method has certain advantages, but it is not applicable to all bogs.

Small Lulu Island Bog

This bog lies at the eastern end of Lulu Island and borders the north arm of Fraser River. At present only the extreme eastern part and strips along the northern and southern margins are being operated. Drillings indicate thickness of peat from 2 to 20 feet. The upper layers consist of high grade moss (absorption factor 18 to 20), but the lower sections are too highly humified to be suitable for peat moss manufacture.

Southern Section - Three plants are operating on the southern margin, namely, Columbia Products Limited, Nelson Peat Company, and Western Peat Company Limited. The first two companies are relatively small, but Western Peat Company, with two plants, is the largest producer in the district. This company has been operating for several years and owns 800 acres, of which 600 are utilized for the production of moss. The bog has a cover of moss 6 feet thick. The upper 3 feet contains moss of good quality, but below this there is a general increase in humification. Harvesting is done with three large stationary conveyors having a total length of 3½ miles that are fed by five portable conveyor belts, each 1,200 feet long. The harvested moss is stored in large sheds, with conveyors running lengthwise along the middle of the floor for bringing the moss to the baling factory. Poultry and horticultural litter and asparagus pads are produced for shipment to the American market.

Northern Section - There are three plants operating on the northern section, namely, those of Pacific Peat Products Limited, Northern Peat Moss Company, and Lulu Island Peat Company. They operate on the "Carncross" system. At Pacific Peat Company's plant the amount of peat fed to the baling machine is automatically controlled so that each bale is of uniform weight.

Delta Bog

This is the largest bog in the district. It lies south of Fraser River. Good roads almost encircle the deposit, and the main line of the Great Northern Railway skirts its eastern boundary. The present area is estimated to be about 5,000 acres, and the quality of the moss is very high in the upper stratum with an absorption factor of about 25, but there is a marked decrease in quality below the three-foot level. Two companies

operate on this bog, namely, Industrial Peat Limited which owns or controls 4,000 acres, and B. C. Peat Company, with 1,000 acres.

Industrial Peat Limited

This company was organized in 1942 to produce the peat moss required by Basic Magnesium Limited for that company's plant at Las Vegas, Nevada, and was by far the largest producer in Canada. In less than nine months (under the direction of E. E. Carncross) 2,000 acres were cleared and drained, drying fields were laid out, miles of field railways were built, an efficient fire protection system was installed, a large labour force was trained, and a quantity of peat equivalent to about 500,000 bales (about ten times the output of the average sized plant) was cut.

The peat was cut and piled in the usual way, and the dried sods were harvested by use of 13 travelling conveyor-belts, each 1,300 feet long. The sods were built up into large stock piles 15 feet high and 1,500 to 2,000 feet long. The stock piles were protected from the weather by light portable roofs and they take the place of the sheds used in the smaller plants. A field railway system carried the peat from the stock piles to the finishing plant where it was shredded, screened, and baled in the usual way.

Late in 1943 Basic Magnesium Limited discontinued the use of peat moss in its process, and the stock of peat on the bog was sold for poultry and horticultural litter.

B. C. Peat Company Limited

This company owns 1,000 acres at the western end of the Delta bog, and uses a quite different system for manufacturing peat moss. Briefly, it consists of excavating the peat with high pressure hydraulic jets and pumping the slurry so formed to the drying plant, where it first passes over coarse screens which remove the twigs, roots, and other foreign matter. The peat-water mixture, which is kept constantly agitated, then passes over vacuum filters and heated rolls, the process used being similar to that used for making paper. After passing through the rolls, the partly dehydrated peat is in the form of a mat about one-quarter of an inch thick. This mat is then disintegrated and falls on to a moving screen which carries it through the drier and eventually discharges it as dry moss. The dried moss is screened into the horticultural and poultry sizes and is finally baled.

This system has certain operating advantages. Operations are independent of weather conditions, drainage of the bog is unnecessary, and working capital is not tied up for several months in the form of a large stock of partly dried peat on the drying fields. On the other hand, there are the capital costs of the installation, the cost of the fuel for operating the

plant, and the cost of supplying the large amount of water required for the process.

CONCLUSION

As a result of conditions due to the late war, the Canadian peat moss industry has become well established. With the improvement in the labour and supply situation producers should be able to retain their markets in the United States especially as quality of Canadian moss is as good as, and in many cases, better than that formerly imported from Europe.

——— 0 ———