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THE BIG SCHEME

The Draining of the Holland Marsh

George Jackson

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Foreword

In December of 1909 Professor William Day came to view the Bradford Marsh for the first time. He would return again and again until finally it became his passion. He was the one person who was there leading the project from the beginning to its completion in 1930. While this book records the events of the reclamation project it is also the story of the enthusiastic and infectious leadership of one person, Professor William Day.

The Big Scheme, the name for Holland Marsh Drainage Scheme, came into local use to differentiate between the two drainage schemes, the Holland Marsh and the Bradford. The Holland Marsh project became "The Big Scheme," while the smaller Bradford Marsh project was "The Little Scheme." In the early days the emphasis may have been placed on the word "Scheme" by some of the more skeptical local folks.

This is a history book. The details included here cover the period from 1909 to 1930, the building phase. The development phase, which started after 1930, involved the settling of the land, the clearing and breaking and the production and marketing of the crops is another story in itself.

While I have put the pen to paper, I have worked closely with Kenneth (Joe) Saint over the past four years to gather the information and document the many details that are included in the text. Joe is the historian. His memory for names, places and events has brought to light many facts that otherwise would not have been part of this story. He is a diligent researcher and he has that easy way of

asking a question that you can't help but answer. His contributions are woven into the story in many places and in many ways. He has read and re-read the various drafts and the final draft reflects his much appreciated comments. We have talked about The Big Scheme for the last four years. Where to from here Joe?

A sincere thank you to Art Janse. Art provided access to his file of Bradford Marsh stories and to the records preserved by West Gwillimbury of the approval and implementation of The Big Scheme. Art read a final draft and from his knowledge of the Marsh helped sort out some conflicting details.

We, and I use the word advisedly, Joe and I, have spoken with many folks about this project. Some are no longer with us, Charlie Davis, Lou Neilly, Sam Catania, Bill McArthur Sr. Three long time Bradford residents, Bill Fuller, Gordon Church and Roy Storey provided information about long forgotten events in considerable detail. Doris Church made available a tape of Tom Fuller's 1987 talk to the Bradford Women's Institute. A sincere thank you to Ron and Karon Mills for making the 1926 photos of the dredge available to us. As mentioned in the story, few pictures were available of those times.

A thank to the following for sharing their memories with us: Herb Taylor, Bruce Turner, Sam Hambly, John Wist, John Duga, Peg Davey, Peter Vander Kooij, Rob Watson, Murray Faris, Clarence Baynes, Bob Brown, Stuart Calhoun, Ida Catania, Doris Hughes, Gwen Kilkenny, Bob Vandenbroek, Martin De Jong, This list may not be complete but if I missed you, I apologize.

You will note that all the measurements are Imperial. All the background information used this scale and the author is of the age where the old scale came naturally. A conversion table is included as Appendix D to help bridge the generation gap.

The Big Scheme

I hope that your memory is stirred when you read this book. If so, please take the time to make a note and let me know. The binding of this book allows for the

addition of new information and your comments would be much appreciated.

This book was printed by The Bradford Print Shoppe. If you know the Bradford

Print Shoppe you know Mikki Nanowski. And, if you know Mikki you have some

idea of the help and enthusiastic support that she gave me in preparing the final

draft ready for printing. Thank you Mikki.

A thank you to son Bob for helping me more fully utilize the capabilities of the

computer.

My wife Helen has been a partner in this project. Her appreciation of the time

commitment to complete this task made the time flow easily. Helen has read the

text, red inked sections, and offered constructive advice. She has provided that

comfortable feeling that you know is there and that helps you through the times

when things aren't going as you planned. Thanks dear, your support has made

this a positive and rewarding experience.

I hope that you will find this book both interesting and informative.

George Jackson

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INTRODUCTION

Those who traveled the eastern approach to Bradford in the summer of 1927 watched Professor Day's new vegetable garden with interest. This was the first year for the two hundred acre Bradford Scheme. The vegetables were growing and flourishing in their straight rows in the muck soils that had been swampland only a year before. Prof Day had predicted that this would be the result of his drainage scheme. As was his way, he was putting his ideas into practice.

At the same time the adjacent Holland Marsh Drainage Scheme (The Big Scheme) was nearing completion. The huge dredge had dug the seventeen and a half mile (24km) canal around the perimeter and the dams were in place and the pumps ready to lower the water table of the Holland Marsh. This lowered water table would allow the peat and muck to dry and make it possible to clear, break and cultivate the organic soil to create a seven thousand acre market garden. While the new Scheme attracted people from the community other venturesome souls came to Bradford to take up parcels of land and become marsh farmers. This new way of farming was a learning experience that involved the clearing and breaking of the marshland and the planting and nurturing of new crops such as lettuce and celery. Marsh farming proved to be a challenge.

The development of the marsh and the vegetable industry came slowly. The economic depression of the 30's and a World War (1939-45) were periods of uncertain times and few were prepared to take the risk of starting a new

The Big Scheme

unfamiliar venture. The economic upturn following the end of World War 2 led to increased activity but it was not until the early 1950's that the travelers on the new Highway 400 saw the last remaining sections of the Marsh being cleared and planted to onions, carrots, potatoes, lettuce and celery. It had taken twenty-five years for the seven thousand acres within the Big Scheme to be broken and planted to vegetable crops.

The reclamation of the Holland Marsh came about when two elements came together, the marsh, the natural resource, and the person, Professor William Day, who had the foresight to see the potential of the marsh and the skills to create the reclamation plan and to implement it. It is quite a story.

Shall we begin.

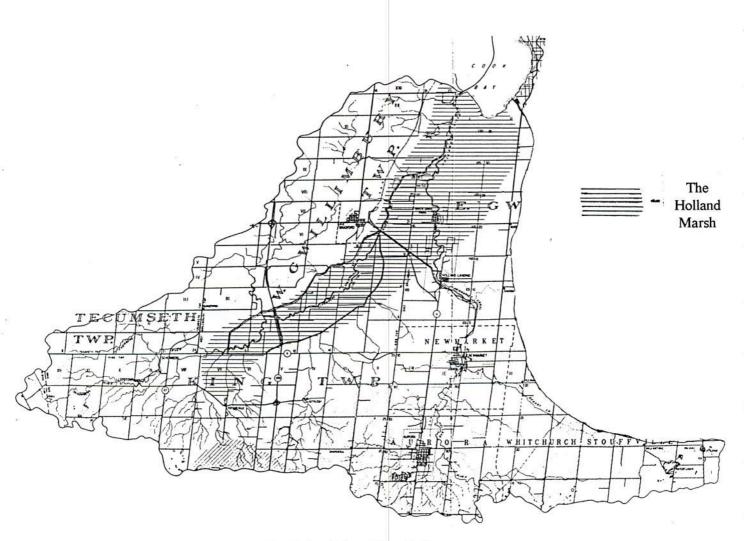
THE HOLLAND MARSH

The first layer of the organic soil of the Holland Marsh was laid down 4,000 years ago. The glaciers had receded, the valley was flooded and trees, shrubs, sedges and grasses, compatible with the flooded conditions, flourished. This vegetation was the raw material for the development of the muck and the peat. This slow natural decomposition process took five hundred years to lay down one foot of organic soil.

The process began with the departure of the glaciers about 12,000 years ago. The glacier in this area, the Wisconsin, was a mile thick in some places and when it melted a glacial lake was created which was called Algonquin. Algonquin, as with the other glacier lakes, was always changing. At times it would get deeper and expand its shoreline then later, due to climate changes or the carving out of a new outlet, it would recede. It must be remembered that these changes occurred over an extended time period, often centuries.

The original outlet for the Lake Algonquin waters was through Lake Michigan. As the glacier receded northward a new outlet was created that allowed the lake waters to flow to the north east. This new drainage way dramatically lowered the water level of the lake, and in particular the Lake Simcoe Basin and the Holland River valley. During this period the valley became a dry bed and nurtured the growth, after a due progression, of a deciduous forest. In time the picture changed. As the glaciers receded still farther north the massive weight of the ice was removed from the earth's crust and it rose up or rebounded. This

rebounding of the earth's crust eventually closed the outlet to the north east causing the waters to again flow to the south. The raised level of this new outlet and the reverse of direction of the flow raised the level of Lake Algonquin causing the waters to return to the Lake Simcoe Basin and the Holland River valley. These rising waters flooded the deciduous forest causing it to die back. The rotting trees and vegetation submerged in the flood waters set in motion the beginnings of the laying down of the first organic soils of the Holland Marsh. This activity began about 4,000 years ago.



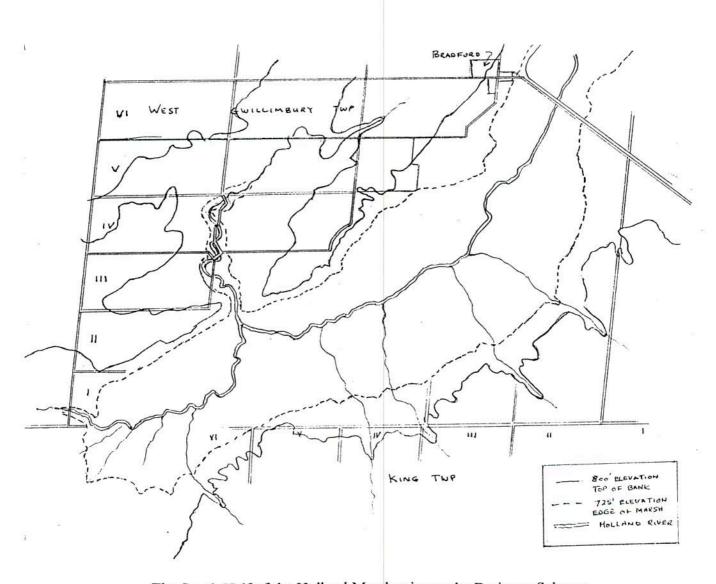
The Holland River Watershed

In the late 1980's a study was undertaken in the Keswick Marsh by a research team from the University of Montreal and Agriculture Canada. The purpose of the study was to explain the origin and the stages of development of the Keswick Marsh. The site they studied was on the east side of the river, adjacent to the outlet into Cook Bay. One study site was in the uncultivated part of the Provincial Natural Reserve at the mouth of the Holland River. The second site was a little farther south in an area that had been cleared and was under cultivation. The study was completed in 1985 and reported in the Canadian Journal of Earth Sciences, vol 23, 1986.

The objective of the study, as mentioned above, was to explain the origin and to examine and document the history of the marsh by examining the pollen and fossils that were found at the site. The study found evidence of hardwood species at the base of the lowest peat layer from which they drew the conclusion that the deciduous forest had flourished in the valley before the peat accumulation began. Information gathered showed that the origin of the marsh was closely associated with the changes in climatic conditions that from time to time favoured the growth of different plant species. They found that after the forest layer the next peat layer was derived from soft herb like plants, followed by a vegetation mix of herbs and shrubs, then later again back to herbs and grasses. In the search for information about the beginnings of the Marsh this is the only research paper that was found.

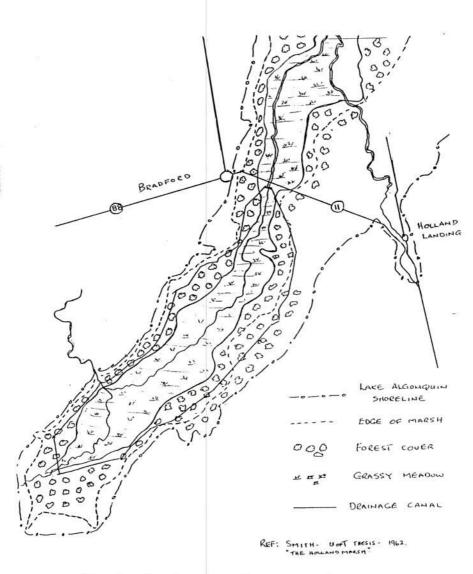
The process begins when a low lying area is flooded or the rate of flow is so slow as to create a stagnant condition. The original plants become submerged in the waters where they are attacked by bacteria, enzymes, insects, fungus and chemical reactions which all act to break down the plant material. This combination of biological and chemical action is also helped by physical forces such as storms, rain, wind and freezing and thawing. The organic material which

is laid down is comprised of the last remnants of the decayed vegetation along with the remains of the insects, bacteria and fungi that were involved in the decomposition process.



The South Half of the Holland Marsh prior to the Drainage Scheme

Some vegetative material such as tree trunks, heavy branches and stumps which are now underwater are in fact preserved. From the beginnings of the cultivation of the marsh the farmers have been removing these logs, stumps and tree roots all left over from earlier generations of vegetation that grew in the environment of that day. As one generation of plant life dies it is followed by another thus layer after layer of organic soil is laid down. This is an exceedingly slow natural process that takes, as mentioned before, five hundred years to build one foot of organic soil.



Showing forest cover and grassy meadows

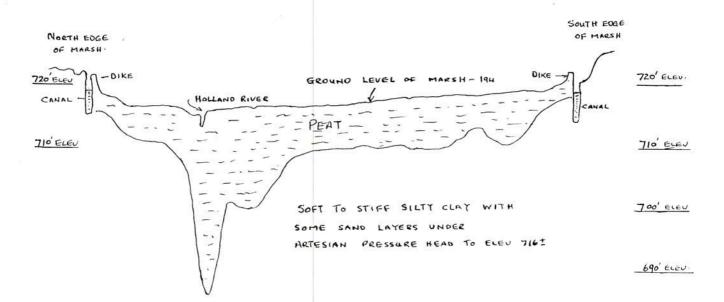
The Holland River valley combined all the features needed to create muck soils. The river was sluggish and slow moving because there was only seven feet of fall from where the river crosses Highway 27, near Schomberg, until it emptied into Lake Simcoe, a distance of eighteen miles, four and a half inches per mile. Taking the earth's curvature into account there is virtually no fall. Because of this almost flat river / lake connection Lake Simcoe acts as a reservoir for the Holland River in dry periods. The temperate climate of Southern Ontario encouraged the growth of many species of brush, alders, grasses, sedges, and herbs for the process to feed on.

The mature marsh of the early 1900's, that has been described in written history, was a series of grassy meadows that straddled the river from its headwaters, near Schomberg, to Lake Simcoe. Bordering the meadows, but still in the marsh, was a mixed forest of cedar, tamarack, alders and shrubs that blended into the surrounding highlands. The grassy meadows provided the raw material for the peat soils, the muck was derived from the wooded portion of the marsh. The peat is not as fully decomposed and is coarser and in a sample it may show partially decomposed leaves or twigs. The muck is more fully decomposed and finer in texture. Both of these soils have the ability to hold three to four times their dry weight in water. When these soils are drained and the water removed the volume and weight of the soil is reduced resulting in the lowering of the elevation of the marsh. This decrease in volume and compaction of the organic soil is known as subsidence.

The marsh still has its own secrets. In a later chapter mention is made of the occasion when a layer of clay moved down through the marsh subsoil and came up to the surface in another area adjacent to the work site. When Highway 400 was being built the Department of Highways soil tests in the area between the Holland River and the North Canal Bank Road showed that the muck soil on

the surface was underlain with a thin layer of mineral clay soil which when penetrated revealed more muck soil to a depth of 14 feet, which was the limit of the soil testing equipment.

The western end of the Marsh is underlain by a large water aquifer at a depth of about one hundred to one hundred and fifty feet. When tapped there is enough pressure from the underground aquifer to bring the water eight feet above the surface of the marsh thereby creating a flowing well. This same aquifer extends north and underlies the highland farms in south West Gwillimbury. This water is gassy and has a high iron content. Where does it come from? No doubt there are other secrets that the marsh still hasn't revealed.



Soil Profile at Highway 400 crossing of the Holland Marsh 1946

The Holland Marsh is comprised of 16,000 acres (6,475 ha) of organic soil. 7,800 acres(3,175 ha) lay north of Bradford and Highway 11, 8,200 acres (5,125 ha) lay to the south-west of Bradford. The depth of the Marsh varies. It is shallower at the edges, increasing in depth to about eight feet towards the middle with some very deep spots along the Holland River watercourse. The soil, on the surface of the marsh, is black in colour, the "Rich Black Soil of the Holland Marsh." Underneath you may find soils ranging in colour from orange to brown to black, alone, or in blends, the varying colors depicting various stages of decomposition. A map of the organic soils of the marsh will show a number of distinct areas, soils which are alike, but are not the same, varying in texture, source material and how they "work."

These organic soils have very little natural fertility and the elements required to grow a high yielding crop of vegetables must be added. The water, nitrogen, phosphorus, potash and trace elements to grow the crop must be provided by the grower throughout the growing season to nourish the plant from the seedling to mature vegetable stage. The marsh soils in fact may be regarded as an inert medium for the physical support of the plant. In other words the Holland Marsh is a large water or hydroponic garden.

The Marsh soils are valued as a medium for vegetable production because they are level and easy to work; the black soil warms up early in the spring; the soil moves with the plant and doesn't restrict its growth; it holds the rain, irrigation water and fertilizer and releases it to the plant when needed and it does not turn to mud which allows for easy mobility during planting, cultivating and harvesting times. And last but not least, the Marsh is located close to the Toronto market.

The Holland Marsh was the raw resource that Professor Day envisaged being transformed into a vegetable garden.

THOSE WHO CAME BEFORE

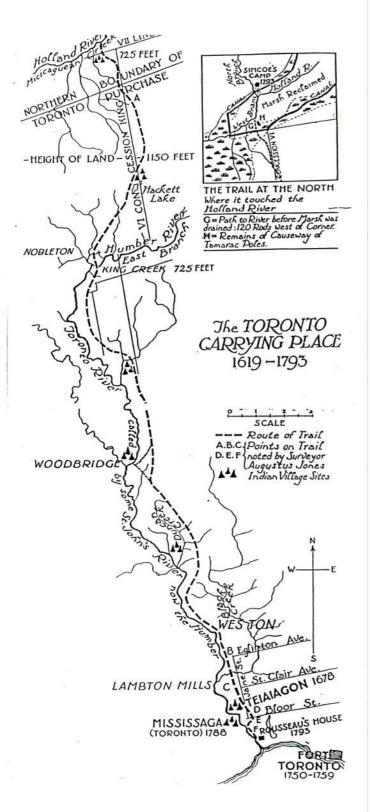
The First Nations People

Evidence has been found that the nomadic Paleo-Indian people of 11,000 to 7,000 B.C. visited the Lake Simcoe area. By the year 4,000 B.C. there was a well established population as indicated by the identification of several sites in the Bradford area. These communities of first nation people were well established, growing crops such as maize and squash and by 2,000 B. C. they began staying for longer periods in one location. Lake Simcoe and the Holland River Valley provided a hospitable environment and a transportation corridor for them to travel, whether their intentions were peaceful or warlike. The hospitable environment included abundant wildlife, fowl and fish. Many local sites have yielded evidence of the presence of both man and game in the centuries gone by. Often we forget about those who have gone before. In the 1840's the Dissette family who lived on Dissette Street often awoke in the morning to find two, three or four native folk asleep in front of their fireplace. A few days later a piece of venison or a string of fish appeared at their doorstep. "Thanks for the warmth."

THE CARRYING PLACE TRAIL

Before Ontario was settled by the "pioneers", those who traveled from the Upper Great Lakes to Lake Ontario often followed the Holland River through the Holland Marsh, to connect with "The Toronto Carrying Place Trail" on their way to Lake Ontario.

This Trail, although arduous, was a well used alternative to the much longer journey through Lakes Erie, St. Clair and Huron.



The route was used first by the native folk then later by trappers and fur traders to do business with the fur trading post at the mouth of the Humber River.

This route provided a safer route to Montreal for one of the fur trade companies allowing them to avoid being challenged on the Ottawa River route by their competitors and the Indians.

This path was well known to the native folk and in their role as guides they directed the early travelers along The Trail. In 1615 Etienne Brule, who was one of Champlain's scouts, followed the Carrying Place Trail in his exploratory trip that took him to the mouth of the Humber River. Brule was the first white man to view the site of Toronto.

In 1793, Governor Simcoe, starting out from York (Toronto), followed the trail up the Humber River and its tributaries, took the portage over the hills of King and descended the long hill to the valley and the swamp. The canoes were dragged over the logs that had been placed on top of the swamp to provide for an easier passage to the creek and the main river. A misstep off the logs meant a drop into the swamp and muck up to your waist. Lady Simcoe in her diary referred to the marsh "as a terrible bog of liquid mud."

Simcoe and his contingent then joined the main river and followed it to where it met the tributary that came from the north. They paddled up this branch to find a suitable campsite on the high eastern bank, overlooking the swamp. The native guides had visited this site on previous occasions. Here Simcoe met with Old Sail, an Indian Chief, who traded goods with him and offered the advice that he should return to York by way of the East Holland River and avoid the swamp. The following morning Simcoe's party rejoined the main river and followed it to Lake Simcoe, then through Lake Couchiching and the Severn River to Georgian Bay. After returning to Holland Landing he learned more details of the suggested route that would take him down the Don River, a more direct link between York and Holland Landing. He took Old Sail's advice and returned to York along this path which he later designated as Yonge Street.

THE SURVEYORS

Many had traveled through the marsh following the river or the creeks, but the first people to study it and record information about the marsh and the surrounding landscape were the surveyors. The first surveyor who inspected this part of Upper Canada was Major Holland, the Surveyor General of Canada, who prepared preliminary maps in 1791. In recognition of his work in the area Holland Landing, the military centre of that day, the Holland River and the

The Big Scheme

Holland Marsh all carry his name. A plaque to commemorate his role in the development of this area has been erected on the west bank of the Holland River at the eastern entrance to Bradford.

Holland was followed by Stegman who surveyed King Township in 1800, Lount who laid out West Gwillimbury in 1819 and Ryan who redid portions of West Gwillimbury, including the Marsh, in 1852. In 1934, 82 years later, Cavell was called in to update Ryan's marsh survey work.

As the surveyor followed the concession line he would record information about the tree cover, the quality of the soil and the topography. These notes provide a record of the type of land, tree cover, topography and the natural features such as streams, rivers and hills and dales before the land was settled. The surveyor's field notes are on file in the Office of the Surveyor General for Ontario in the Ministry of Natural Resources Centre in Peterborough.

The notes identify the lot being described and the distance along the lot line, expressed in chains, that the feature described is located (e.g., 33 -15, creek NW, SE would be lot 33 and then at 15 chains* from the beginning of the lot there was a creek running NW/SE). These notes record the observations along the lot lines so there is no record about features between the lines. The notes regarding the marsh are limited because the early surveyors did not run their lines into the marsh. Their observations were made standing on the edge of the marsh or from the higher hills overlooking it. (*one chain = 66 feet, 15x66 = 900 feet = 301m.)

The eastern limit of Stegman's survey of King Township abutted the earlier survey that had laid out the lots on both sides of Yonge Street. Included in Stegman's survey of King are the lands that lay north of Highway 9 and lay between Bathurst Street and the Holland River (Keele Street). At this time these

lands were in West Gwillimbury Township. In his notes on the concessions two and three lines as he approached Lake Simcoe he referred to the marshy lands that he came upon as "all Tamarack and Cedar swamp and very poor broken land."

Further west, following the sixth concession of King(Weston Road) northward, Stegman noted that commencing at lot 29, (the Pottageville Road) the land was "descending". He also noted the tree cover - maple, beech and basswood. At lot 33 he found "broken land" and at Lot 35, the northern limit of King Township, the beginning of the "Cedar and Tamarack Swamp"

Gabriel Lount ran his base line for the West Gwillimbury survey in 1819 along what we now call # 9 Highway. This was before 1852 so his notes make reference to the lots east of the Holland River, again part of West Gwillimbury at that time. Starting at the western boundary of the township he noted in lot 1 "maple, elm, basswood and pine." Half way into lot 2 he ran into "marsh, sunken land." Lot 3 was noted as "tamarack and cedar swamp, sunken land." No mention is made of the conditions found on the intervening lots. The early surveyors did not continue their survey lines into the marshy lands because these lands were considered as worthless and uninhabitable. Lount's notes commence again with mention of the west part of lot 8 as a "cedar swamp", while the east half is covered with "oak, maple and hemlock." (This is the rise where Highway 400 meets Highway 9.) This same description, "oak, maple and hemlock" follows through until lot 12 where he mentions a "small swamp" (the Cardinal Golf Course lands).

In 1852 the portion of West Gwillimbury that lay south and east of the Holland River was granted to King Township by the County of Simcoe. The lands on the east side, concession two and three of King, are referred to as "The Old Survey". The concessions one, two and three in King that lay south of the river are

referred to as "The New Survey" and are identified in the Registry Office as such today. In 1852, as a result of this transfer, John Ryan was instructed to survey again the lands adjacent to and in the Holland Marsh and to lay out the lines and lots on the marsh lands conforming to the lines of the original Township of West Gwillimbury survey. His survey included the lands of West Gwillimbury from the King Township line to Lake Simcoe. By 1852 most of the high lands had been taken up and the marsh lots were an extension of the highland lot and not considered to be of much value.

In conducting this survey Ryan proposed a classification system for the lands that he surveyed. This land classification system, with appropriate land values, were marked on his map and it was a valuable guide to the new settlers looking for good arable land. The value he assigned to each class is in pounds, shillings and pence, the currency of the day.

The system read as follows:

Class	Value/acre	Relative Character
1	1.10.0	prime hardwood, good soil
2	1.05.0	light, rough or stony-dry land
3	1.00.0	dry swamp, well timbered
4	0.15.0	dry swamp, indifferent timber
5	0.10.0	soft swamp, fair timber
6	0.05.0	soft swamp, inferior timber
7	0.02.6	clear marsh, fair grass
8	0.01.3	clear, sedge or quagmire marsh
8.5	0.01.0	clear, more barren quagmire

It is interesting to see a land classification system being proposed in these early days. The recognized land classification system of today, the Canada Land Inventory, did not come into being until the 1940's.

In 1854 Ryan extended the survey of the town of Amsterdam, which lay on the east bank of the Holland River and straddled the road and the new railroad right of way that led to Holland Landing. Gabriel Lount had laid out a small plan in

1836 to accommodate some storehouses. The Amsterdam plan is still recorded but the town never grew.

In 1934, 82 years later, Cavell, reworked Ryan's survey, replacing the lost corner markers and trying to correct some of the concession and lot lines. The marsh was a more hospitable environment in 1934 and new methods were available to assist in making a more accurate survey. At the Annual Meeting of the Association of Ontario Land Surveyors in February 1935 Mr. Cavell presented a paper, entitled "The Holland Marsh", in which he described some of the problems associated with completing this task. The quotations which follow detail the problems of conducting the survey and provide us with a description of features of the marsh such as water levels, tree cover, depth of the muck, a record of the marsh before it was cultivated.

The following is a portion of his report:

"In 1818 the lands in this vicinity were purchased from the Indians, and in 1819 Gabriel Lount began to survey the Township of West Gwillimbury. He posted the lots on the high land, carrying his concession lines only to the edge of the marsh and on his plan shewed a large tract of waste land. The Township of West Gwillimbury as originally laid out included what in now known as the "Old Survey" in the Township of King. This was transferred to the Township of King in 1852, the Holland River then became the boundary between the Townships and also between the Counties of York and Simcoe. In the same year John Ryan was instructed to survey the marsh into its concessions and lots conforming to the lines of the original Township of West Gwillimbury. He was to mark the front angles and the lines between the north and the south halves of the concessions.

As the marsh was practically the same level as the water in the river we can understand the difficulty he had in carrying out his work. His lines were run by compass, and wood posts, mostly tamarac were planted."

Cavell's report goes on with the details of the survey which he undertook. He mentions that it was a problem to make the lots of equal size when the lines that were supposed to be parallel were not parallel. This situation arose when Ryan had extended Lount's survey lines through the marsh. Some of Ryan's measurements were made from a boat and his lines were run using a compass rather than a surveying instrument. This problem lead to lengthy discussions and disagreements and there are still problems with property boundaries in portions of the marsh, based on Ryan's survey.

Again from his report:

"I have been successful in finding the originals (lot markers) at nearly all the corners required in the surveys I made. The marsh has been burned over a great many times in the 82 years since these posts were planted so that in only a few cases did I find the top part of the stake where they had fallen over, and on only two could the lot number still be seen. The wet nature of the soil, together with the fact that the tamarac is full of pitch accounts for the preservation of that part underground. Some are so well preserved that the points are as sound as when planted. The best time of the year is to dig for these posts in the winter when the ground is frozen. It usually freezes to a depth of six inches, and unless in a drained area, the water is right at the surface. With sharp axes this frozen layer is broken off in sections two feet by four feet and turns over like a slab of concrete. If

the stake is there it will be seen sticking out of the bottom of the slab. There is never any problem identifying the original since they are about three inches in diameter, usually about two feet deep, square pointed and of tamarac wood. Where I had to replace the originals I used galvanized iron pipe, 2 1/2 inches in diameter of such length to drive 4 or 5 feet into the subsoil below the muck. Some pipes were needed twelve feet long but usually 7 or 8 feet gave sufficient depth."

In his 1935 report Cavell described features of the marsh that he had observed and commented on some of the activities, such as land breaking. These notes are one of the few written records of those days.

"The breaking is done by tractor plows turning over a furrow 2 feet wide and 8 inches deep. The soil consists principally of grass roots and dries to a good quality peat. Care must be taken to prevent fire getting started since it is very difficult to put out. There are some areas almost ruined by fire burning off the muck.

At some early period, what is now open grass marsh, must have been covered by trees, since the stumps and the tree trunks are found under the surface. These make it necessary to have men follow the breaking plow to pull them out of the way for the next cut. The presence of these trees and roots add to the difficulty of digging ditches as sometimes tree trunks one foot through are found buried and must be cut out of the way. The wood in these logs is generally quite sound."

After the marsh was drained and was being developed Cavell surveyed and laid out a number of the plans of subdivision including the plan for Ansnorveld.

THE SETTLERS

The first folk who came to settle in West Gwillimbury also were well acquainted with the Marsh. One group, the Selkirk Settlers, had lived In Holland Landing, for two years after their journey from Fort Garry (Winnipeg) and they were anxious to take up the lands that had been promised to them. They were granted lands in the new township and the easiest access to these lands was by way of the Holland River. In the spring of 1819 they followed the East Branch of the Holland River from Holland Landing north to the main river then turned south. This wide river, about 100 feet wide, bordered by trees in some areas, cattails and grassy meadows in others, wound its way through the seemingly endless swamp. The settlers had learned from the native folk about a smaller river that branched off the main stream and wound its way back up into the higher lands. Following this branch of the Holland they found their way to their new lands on the third and fourth concessions of the new Township of West Gwillimbury.

At about the same time an overland route from the Landing was established to provide access to Bradford and the new West Gwillimbury. This route followed the higher ground north of what we now call Yonge Street then as it approached the river came south to a crossing of the river in line with what is known as "the Sixth Line." A hand propelled ferry provided the means to cross the river at this point. This crossing was used until 1824 when a bridge crossing was built about where Yonge Street crosses the Holland River.

THE MARSH HAY HARVESTERS

Until the 1880's wild game and fish were the main crop harvested from the marsh. At this time the first marsh hay harvesters Paul Courier and his son-in-laws Joe Le Duc and Charlie La Vine started the harvest of the marsh hay in the meadows on either side of the river. The harvesting of marsh hay would continue for the next fifty years. The marsh hay business grew from a modest beginning until it reached its peak about 1914. About 12,000 acres (4800 ha) of hay were being cut at that time along the river from south of Bradford to the lake.

The first harvesters cut the hay with a scythe and carried it off the marsh on their shoulders. Later, wooden rectangular pads, "boots," were fitted to the horse's hooves allowing them to travel on the marsh and pull the mowers, rakes and wagons. In due course home made tractors with steel wheels followed by rubber tired farm tractors provided for the mechanization of the operation. The first hay balers which came to the marsh, about 1905, were horse powered. These were replaced by gasoline engine powered units that baled the hay which was then transported by barge to the dock at Bradford. Travel to and from the harvest location for men, horses and machines was by boat and by scow.

The marsh hay was also called swamp grass, sometimes sea grass, and as the name implies, it grew in marshy wetlands. It had a spreading underground root system that formed a mat on the marshy surface that would support considerable weight. The fine stemmed grass grew to a height of three feet. The leaves were about three eighths to half an inch in width and about a foot to a foot and a half in length. When you run your finger along the edge of a leaf from the tip to the stem it feels like fine sand paper. For this reason this hay could not be fed to livestock. Damp marsh hay was twisted into a rope and when dry it would keep the "curl". This "curled" hay was used to stuff mattresses. Its resiliency also found

it in demand as packing material for fine furniture and china to ensure that these costly items arrived at their destination undamaged.

Over the years there were many harvesters who followed Paul Courier. Those best known were Ben Collings and his family, Jim Armstrong, Brunett Caesar, George Lowe and Laddie Hamilton who all had their base and storage barns in Bradford. Sidney Goodwin and the Fosters worked out of Holland Landing, harvesting the east side of the marsh. From the harvest there came jobs in the Collings mattress factory and the shipping of the hay to the department stores and the glassware and china wholesalers in Toronto. The marsh hay harvest is a long forgotten activity in Bradford and The Landing but during its "heyday" it was a real benefit to the economy of the two communities.

THE PEAT STUDY

The Holland Marsh was included in the 1912 study of Canadian Peat Bogs. This study was prompted by a fuel wood shortage in the early 1900's and coal was expensive. Peat had been used for centuries as a fuel and many of the new settlers who came from Europe were familiar with its use.

The following is quoted from the Bog Study Report and describes some of the findings:

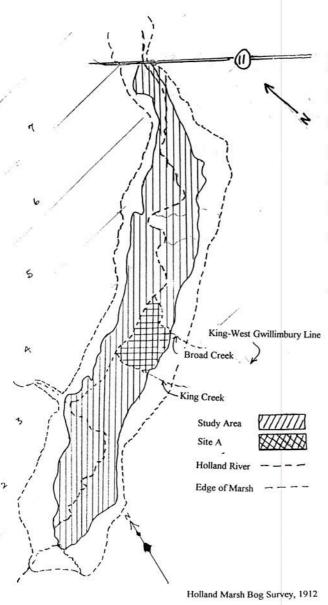
"That portion of the bog lying between King and Broad Creeks and to the north of King creek, on the eastern shore of the Holland River, is very well suited for the manufacture of machine peat. It is well humified, has a satisfactory depth and level and smooth surface and can be worked along a line about a mile long each way. (see site A on the map).

This part of the bog has a higher average depth then the rest. The peat of the remainder of the eastern portion of the bog and that portion of the western part lying south of the grand Trunk Railway is

fairly well humified and with proper treatment can be utilized as peat fuel, however, the average depth is not more than five feet and it will require a considerable area to produce a large output. The northern part of the bog is shallow and less decomposed." (This is the portion of the marsh which lies north of Bradford.)

The study found:

9,030 acres (3612 ha) 62 % with an average depth of 3 feet (1m) 4,025 acres (1610 ha) 27.5% with an average depth of 5 feet (1.6m) 1,025 acres (410 ha) 7 % with an average depth of 9 feet (2.9m) 506 acres (202 ha) 3.5% with an average depth of 18 feet (5.9m)



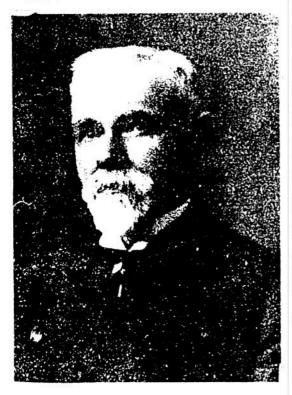
It was estimated that 8 million tons of peat fuel could be harvested, assuming that a cubic yard of the peat from the drained bog would yield 200 pounds of dry peat. Apparently no action was taken following this study. This study considered the marsh organic matter as a source of fuel to be mined just like an open pit coal mine.

The Big Scheme

THE MEN OF VISION

Every project that is undertaken is initiated in response to the efforts of a person or persons who have a vision in mind. As is so often the case when many are skeptical about the success of a project the leaders are few in number. The project to reclaim the Holland Marsh was no exception. In this instance the three "Men of Vision" were Fraser, Watson and Day. W. S. Fraser, W. D. Watson and Professor W. H. Day were those who were credited with the "vision" of the reclamation of the Holland Marsh, The Holland Marsh Drainage Scheme.

Mr. W. S. FRASER



William Sutherland Fraser lived on the north side of the fifth concession, S1/2 lot 14, Con 5 of West Gwillimbury, on the edge of the marsh. He was born in 1850 and was a member of a highly respected family that had lived in this community since coming here as Selkirk Settlers 1819. Both he and his wife were well educated and had a special interest in helping other farmers and their families improve their farming methods and lifestyle.

He traveled around the province and in other parts of Canada, speaking at "Farm Institute" meetings, on agricultural subjects. In his travels he met up with Professor Day who was speaking at the same meetings on his favorite subject, the benefits of farm drainage. Fraser in all likelihood discussed the possibility of reclaiming the Bradford Marsh, after hearing Day tell, in most enthusiastic terms, of other drainage projects similar to the Holland Marsh. As well, Fraser had the opportunity to view some of the marsh drainage projects in his travels in south western Ontario.

Fraser had tried growing vegetables on the marsh land on his own farm with limited success because of the wet conditions. He and his neighbour, Dave Watson, were both interested in the potential of the Marsh and they often discussed the possibility of a drainage scheme. Watson lived on the same line as Fraser in West Gwillimbury. Over dinner one night Fraser suggested to Watson that he take the lead in this enterprise because he, Fraser, who was now sixty years of age, felt that he was too old a man to undertake such a task. Watson picked up on the challenge, he contacted Day and set the wheels in motion.

Day came to see Watson and the Holland Marsh in December of 1909. This visit resulted in a meeting in Bradford in April of 1910. The meeting was called to discuss the proposal to pump out the Marsh after the method adopted in the south west of the Province. The well attended meeting was reported in the April 14th, 1910 edition of the Bradford Witness. During the meeting Mr. Fraser suggested that there were several very positive aspects to this project and he was in favour of taking immediate action. A committee was formed and Fraser, Watson and T. R. Morris were selected as the West Gwillimbury representatives.

While W. S. Fraser's name does not come up again in any reports of activities related to the project he was there when the seed was planted. He moved to Aurora in 1919 when he sold the West Gwillimbury farm. He passed away in 1925 and is buried in the 2nd West Gwillimbury Presbyterian Church Cemetery on the Fifth Line of West Gwillimbury.

Mr. W. D. (Dave) WATSON

On October 7th 1910 W. D. Watson wrote to Professor Day encouraging him to take heart and not be discouraged by the indifference of the local community towards their project. He wrote:

"As I stood tonight at sunset and looked over the 'promised land' with its broad acres of unbroken greatness with the wooded hills of King in the background I felt a glow of pride at the immense possibilities which lie in The Scheme which we are now formulating."

W. D. Watson was no stranger to West Gwillimbury, Bradford and the Holland Marsh. Watson was born in Bond Head in 1867 and he farmed the N ½ of lot 15 con 4 in West Gwillimbury. He built the building which we now know as "The Village Inn" in Bradford which he operated as a grocery store. Watson's name would rarely be mentioned in Bradford these days if it were not for the fact that he was the person who invited Professor Day to come to Bradford. Watson led the delegation to West Gwillimbury and King Township Councils in 1911 asking the Councils to consider the reclamation project. The request was denied. At the time when he approached the Councils he was the President of the Holland Marsh Syndicate and he had already negotiated five year options to purchase much of the marshland in both King and West Gwillimbury, on behalf of the Syndicate. In 1912 he assigned all the options to Professor Day and he took no part in the reclamation project from that date.

Watson sold his grocery business and took up selling real estate, followed by a successful insurance business in Bradford. In the early 1920's he moved to Aurora where he was considered as an "energetic citizen." He took and active interest in the Board of Trade and the Aurora Horse Show and the raising of Karakul Sheep. He passed away suddenly in 1924 at the age of 57. He too was a man of vision who did not live to see his earlier "vision" become reality.

PROFESSOR WILLIAM HENRY DAY



WILLIAM HENRY DAY

William Henry Day was born on a farm near Fenelon Falls, Ontario, in 1870. He attended Lindsay Model School and later the Ottawa Normal School graduating from there as a teacher in 1892. Day taught elementary school for six years prior to entering the University of Toronto in 1898. He graduated from the University, with honours, as a Gold Medalist in Physics in 1903 and upon graduation joined the staff of the Department of Physics Ontario Agricultural College. This step launched his research career.

He was a research scientist who took his new methods out to the farms and applied them, usually with success. He was a good communicator, in meetings or one to one, and he could relate to the problems that farmers faced. This

hands on approach to field testing his theories did not always meet with the approval of those in authority or with the private sector.

In the publication "The History of the Physics Department at the Ontario Agricultural College" Day is referred to as "The Professor of Lightning and Drainage." The history states that:

"Day was as productive an applied physicist as the Province has ever seen. A small cairn in the Town of Bradford is to-day the only subject on which his name is preserved, but few men have conferred like benefits on the Province as did Day. His accomplishments rank with Sir Adam Beck, the founder of Ontario Hydro."

The story is told that as a young man he undertook a small drainage project that added additional productive acres to the family farm. At Guelph, farm drainage became his consuming interest. He traveled the province speaking at farm meetings about the economic advantages of on-farm drainage. As early as 1906 the Ontario Agricultural College was conducting farm surveys and drawing the plans for the tile drainage system for an individual farm. In 1918 in recognition of the interest and need for farm drainage the province initiated a farm drainage financial assistance program that was in place until the 1980's. Day's Bulletin #174 published in 1908 asked the question "Farm Drainage: Does it Pay? The answer, an emphatic YES.

It was about this time, in 1909-10, that Day visited Bradford for the first time and met those who were interested in draining the Holland Marsh. This was the beginning of his interest in reclaiming the Holland Marsh, an interest that in time would become his passion. We will return to Professor Day and his involvement with the Holland Marsh in due course.

Day made things happen but sometimes he didn't follow all the rules. Without the approval of the College, for whom he worked, he purchased a tile drainage machine for his department, justifying the purchase as required for research purposes. He and his family eventually owned three tiling machines and some of the private operators saw this as a conflict of interest on Day's part. These charges found the ear of the Minister of Agriculture. The President of the College heard of these concerns, especially when they came from the Minister, the College's source of funding. After much discussion Day was relieved of any further involvement with the drainage program.

Drainage had not been Day's only interest. When he joined the Physics Department he had helped complete the lightning survey that had begun in 1899. The survey provided information about what happened when buildings that were or were not protected by lightning rods were struck by lightning. By 1914 Day outlined in a Department bulletin the procedures to be followed when installing lightning rods on farm buildings. The installation of these rods effectively directed the lightning strike into the ground and saved many a farm building from destruction by fire.

The Physics Department history noted "Billy Day was a complex and difficult person who was obviously a thorn in the side of those in position of authority over him". He was blunt, aggressive and well aware of his abilities. He would not submit meekly to the President (of the College) or to the Minister (of Agriculture). With the Drainage program taken from him and the lightning rod matter resolved Day was expected to become solely a researcher and teacher within the Department of Physics. He tolerated this role until 1919 when he resigned from his position as a Professor in the Physics Department of the Ontario Agricultural College.

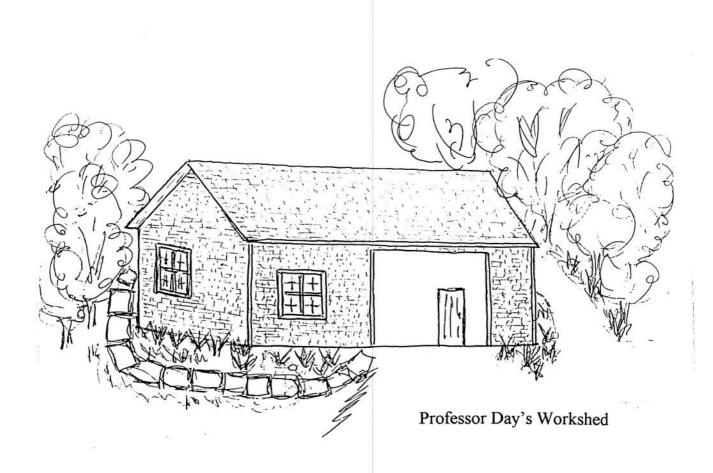
He joined the Shinn Lightning Rod Company as a Manager. While with Shinn he again took up his interest in the Holland Marsh Drainage project. When West Gwillimbury Council showed a positive interest in taking action in early 1924 Day resigned from the Shinn Company and moved his family to Bradford. They lived first at "the Pines" on the corner of Church and Queen then later at 126 Barrie Street, the white house on the northwest corner of Barrie and Queen.

During his time in Bradford, Day was the leader of the project. He promoted, he planned, he schemed, he negotiated, he managed crews, he surveyed, he grew vegetables and he was everywhere where something about the scheme was happening. Once again as in his College days, he was in the field applying his theories. He made sure that the plan worked.



W. H. DAY & SON

Professor Day died at the age of 67 while working in the fields of his KingGwillBra Gardens farm on the Bradford Marsh, on the south side of Bridge Street. His storage and work shed still stands, a rather small red insul-brick covered barn that sits at the rear of 212 Bridge Street.



He had seen his "Vision" of the Holland Marsh Drainage Scheme become reality. He had seen his own fortunes rise and wane and although he didn't know it, the Holland Marsh was about to enter a very prosperous era. If he had lived he would also have seen the packing houses come to Bradford, to handle the crops, as he had predicted in 1927.

The prominent cairn in front of the Bradford Town Hall carries a plaque that states:

In memory of WILLIAM HENRY DAY

Professor of Physics at O.A.C. Guelph, whose foresight and energy were principal factors in the development of the Holland Marsh Gardens. He came to Bradford in 1924 and harvested his first crop in 1928. He died suddenly, while at work in his garden

July 5, 1938.

Erected jointly by County of Simcoe, Townships of West Gwillimbury and King and the Village of Bradford

1956

Professor Day has been inducted into the Simcoe County Agricultural Hall of Fame in recognition of his role in the development of the Holland Marsh. While you may not recognize the name or the role that this man played in our community there are reminders around town of his time with us. The W. H. Day Public School is named in his honor as are two roads, Professor Day Drive which runs along the western border of our town and Day Street on the Marsh which runs south from the North Canal Bank. The next time you walk past the cairn in front of the Town Hall, take a minute to read the plaque and doff your cap in a salute to "The Man of Vision", Professor William Henry Day.

The Big Scheme

THE BIG SCHEME

THE BEGINNING

As early as 1852 a scheme was proposed to drain the Holland Marsh by lowering the level of Lake Simcoe. This would be accomplished by deepening the outlet of Lake Couchiching allowing more water to flow out to Georgian Bay through the Severn River and at the same time lower the two lakes, Simcoe and Couchiching by four feet. The lowered level of Lake Simcoe would drain the waters from the marsh allowing the surface layer of the marsh to dry out and be utilized for crop production. Understandably, considerable criticism of this plan was raised and coupled with concern about possible claims for damages from the owners of lakefront property on the two lakes and from Barrie, Orillia and the other towns, the idea was soon set aside.

In the previous chapter the roles of the "Men of Vision" were discussed. Their foresight, active leadership and continuing interest led to the project being planned and undertaken. Fifteen years would pass from the first visit to Bradford by Professor Day until The Big Scheme was approved by West Gwillimbury Council and the dredge began digging the canal. Let's fill in some of the details of what happened during these fifteen years.

In December of 1909 Professor Day, at the request of W. D. Watson, spent a day and a half viewing the marsh. He came back in the spring of 1910 and on April 10th met with the group of Bradford and West Gwillimbury residents who were interested in draining the Holland Marsh. At this meeting he pointed out that the

idea of reclaiming the marsh was feasible citing examples in South Western Ontario where acres of former marsh were now under cultivation. He mentioned the Tilbury scheme of 7,800 acres that had been drained for a cost of \$77,000, a little less than \$10.00 per acre.

With the land drained the value of the land increased from worthless to \$30.00 to \$60.00 per acre. He suggested that drained land in the Holland Marsh would be more valuable than similar land in Kent County because of the proximity to the large Toronto market. He told the meeting that:

"the first step was the getting up of a petition by interested parties and presenting same to the Township Councils directly concerned for the appointment of an engineer to report on the scheme."

At the close of the meeting Messrs. W. S. Fraser, T. R. Morris, W. D. Watson for West Gwillimbury and Messrs. Davis, Black and Gibbons for King were appointed a committee to prepare the petitions to West Gwillimbury and King Councils. The petition would request that a scheme be undertaken to reclaim that part of the marsh, about 12,000 acres, that lay south and west of the Holland River bridge. The committee circulated the petition which was presented to West Gwillimbury Council on May 7th, 1910. The cost of the project was questioned so it was decided that an engineer should be asked to conduct a survey and prepare an estimate. On June 4th, 1910 West Gwillimbury Council agreed to provide financial assistance with the passing of the following motion:

"granting the sum of twenty-five dollars (\$25.00) toward a fund to help defray the expenses of an engineer toward the lowering of the water in the Holland River and the marsh adjacent thereto, in connection with King Township with the distinct understanding that we incur no further liability."

In addition to the Township funds a number of the land owners helped to fund the cost of Baird's survey. No mention is ever made about any remuneration being made to Professor Day for his work.

The engineer invited to come to Bradford was Alexander Baird who was both a Civil Engineer and an Ontario Land Surveyor. Baird was born in 1855 in New York City. He was 8 years old when his father passed away and the family returned to Kincardine, Ontario, his mother's home town. Baird studied to be a surveyor and in 1873 passed his preliminary Ontario Land Surveyor's exam. Following a period of indenture with W.G. McGeorge in Chatham, he wrote his final exam and was one of the three who passed the test that year. Having also earned a Civil Engineering degree he opened his own office in Leamington in 1877. Forty seven years later, in 1924, he moved his office to Sarnia.

Much of his drainage work was associated with the draining of marsh lands, in particular, the Pelee Island project, which turned acres of marsh land into farmland. Baird came to Bradford in 1910 with a long list of accomplishments to his credit and the respect of his peers.

The Bradford group requested that he:

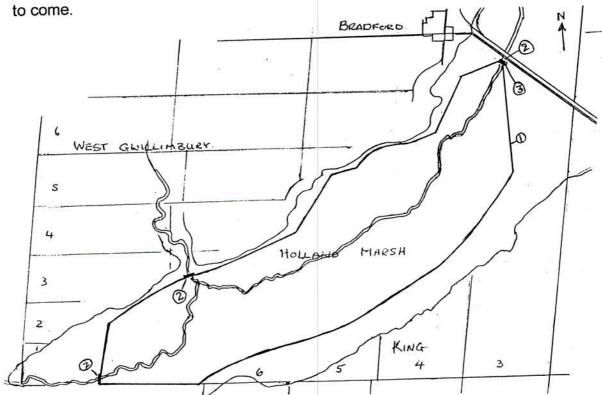
"make a preliminary survey and determine roughly the cost of the required work."

His initial survey was filed with the Township on July 2nd, 1910. Further information was added to this preliminary report, but all was filed to be discussed at a later date. His "preliminary" work was done in some detail as shown by a map and plan for the proposed scheme dated September 4, 1911 and signed by Baird. The map showed the alignment of a canal around the perimeter of the marsh, the area of the "open marsh", the "swamp" lands, the forested area and the owner of each parcel of marsh land in the study area. A member of Professor Day's family

still had the original linen map in their possession and made it available to be copied and

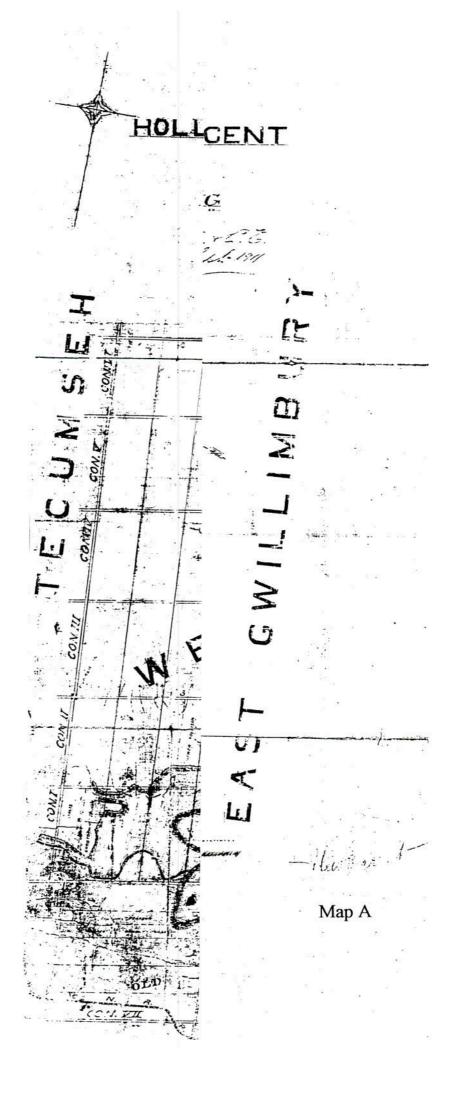
available for reference. A reduced scale copy of the map is shown as Map A. You will note the holes in the corners where the linen was worn through. The original map measured two feet by three feet, so much detail is lost with the reduction. The names on the properties are not legible on this map but they are listed in Appendix B, identified as to Lot and Concession.

This was a one of a kind plan because it would use the existing river, the Holland River, now isolated from the rest of the watershed, as the drainage ditch for the marsh lands. The plan created a lot of interest at that time and for years



The Three Main Components of The Big Scheme

- 1 The 17 ½ mile perimeter canal
- 2 The three dams
- 3 The pumps





The proposed plan had three key components:

"1) construct a cut-off ditch or canal around the perimeter of the marsh along the base of the highland to prevent water flowing onto the marsh, or into the old river course. If this were done, then the high-land water, shut off from the upper river would be diverted along the canals which would empty into the river below the reclaimed area.

2) construct a dam across the river at the lower end of the reclaimed area so that the lake water could not back up the enclosed portion of the old river bed.

3) install a pumping plant to pump the water from the enclosed section of the river over the dam whence it would flow into the lake as at present."

Day went on further:

"With the water level in the enclosed river lowered and maintained at four feet to five feet below the be ample outlet for drainage."

While this 1911 plan may have been considered as "preliminary" this same three point concept was the basis for Baird's Engineer's Report that was presented to West Gwillimbury Council in 1924 for their approval.

In the spring of 1911, March 4th to be exact, King Township Council passed a motion which read:

"that the clerk be instructed to correspond with W. D. Watson of Bradford and notify him that if the Councils of Bradford and West Gwillimbury meet and have Mr. Baird present, the members of this

The Big Scheme

Council will be pleased to meet with them and discuss the advisability of reclaiming the marsh."

King Township stated that they were willing to meet and discuss the matter but West Gwillimbury Council thought otherwise. They passed a motion stating:

"that owing to the lack of interest on the part of land owners of marsh land in the West Gwillimbury side of the Holland River, we the Council of the said municipality are of the opinion that meeting with the Councils of King and Bradford would not accomplish anything. We are also of the opinion that this marsh can be drained only by a private corporation and with private capital and this Council will encourage every effort and render such assistance from time to time as seems to them advisable and that a copy of this resolution be forwarded to the King Council."

As far as West Gwillimbury Council was concerned this was the end of the discussion.

It is interesting to note that Watson and Day did as the West Gwillimbury Council suggested, they formed a group, The Holland Marsh Syndicate, that sought private financing to carry out the project. More about this later.

Professor Day had taken samples of the marsh soil to Guelph to be analyzed by his colleagues at the Ontario Agricultural College. Based on their findings Day stated that the soil was found to be:

" high in lime and medium in other mineral content, it is almost identical in composition to the famous onion lands of Point Pelee, the strong sugar beet area of Wallaceburg, the wonderful celery lands of Thedford in our province and the world renowned celery soil of Kalamazoo, Michigan."

To prove the point that the marsh soil was productive Day, W. D. Watson and Ernie Collings, grew an assortment of vegetables in a plot at the rear of Lukes' mill. The plot was prepared by heaping up the marsh soil to a depth of three feet, above the level of the marsh, so it would dry out. This plot would be similar to the marsh soil once it had been drained. They grew celery, potatoes, pumpkins, oats and beans. The celery was the first prize winner at the local fair.

No doubt discussions about the Holland Marsh Drainage Scheme continued but the outbreak of the World War in 1914 set the issue aside for the time being.

THE HOLLAND MARSH SYNDICATE

The Holland Marsh Syndicate was initiated by W. David Watson and Professor Day. The less than enthusiastic response of the respective councils prompted Day and Watson to look at an alternative method of financing The Big Scheme. By November of 1911 they had formed the Holland Marsh Syndicate with a membership of five. The members held fifteen shares, five held by W. D. Watson, five by Professor Day, R. L. McKinnon, a lawyer, held two, David Baird, Alex's son, held two and W.G. Lumbers, a wholesaler from Toronto, held one. Watson and Day who jointly held ten shares had control. Dave Watson was the President and Prof Day acted as Secretary.

In November of 1911 they were busy soliciting funding for their reclamation project from outside investors. Their initial plan was to drain all the marsh, from Lake Simcoe to the south end of the marsh. While they planned to complete the

reclamation of the south portion first they wanted to buy the marsh land in the north portion so they wouldn't have to pay inflated land prices later on. Day, as Secretary, was writing and making presentations to investment dealers in Toronto trying to borrow \$200,000 to \$250,000 to purchase all the marsh, drain it and break it ready for crop production. While all this was going on Day was still employed by Ontario Agricultural College. Some of his correspondence in this regard went out on the College letterhead signed by him as Secretary of the Holland Marsh Syndicate. Apparently, their efforts to raise the necessary funds were unsuccessful.

The Syndicate was active in another area. At the same time that Watson and Day and their colleagues had approached the King and West Gwillimbury Township Councils asking them to consider the drainage scheme for the marsh, Watson, on behalf of the Syndicate, was negotiating five year options to purchase the marsh land in both municipalities. In the early months of 1911 he optioned eighty percent of the marsh land within their proposal. Keeping in mind their larger plan, he also optioned a number of properties within the Marsh, but outside the planned Scheme.

A search conducted in the York County Land Registry office showed that on February 1st, 1911 W. D. Watson registered five year options on nearly all the marsh land in King Township that would fall within the proposed drainage scheme. He must have been a very busy man, or he had some helpers, because he negotiated the options with some seventy land owners. No mention is made of any money changing hands. One option was for a one thousand acre block in King Township which gave Watson the right to purchase the lands for \$6.00 per acre The Simcoe County office showed that he followed the same procedure in the early months of 1911 when he optioned the marsh lands in West Gwillimbury. The options were for a five year period expiring on Dec 1st, 1916. From 1911 until 1916 options were held on 2,395 acres in West Gwillimbury

and 3236 acres in King for a total of 5,631 acres or 80% of the total of 7163 acres of marsh land within The Scheme.

In February 1912 Watson assigned all the options to Professor Day and departed the scene (see appendix A). Maybe Watson was discouraged because they hadn't been able to raise the funding they wanted. As well, Baird, the engineer, was unhappy with the Syndicate arrangements and this may have created conflict and hastened his departure from the scene. Watson's name does not appear again as an owner or part owner of any marsh land nor does he appear to have had any further involvement with the Syndicate.

With the options in hand Day set out to interest small investors in the purchase of marsh land. In late 1916 Professor Day re-negotiated and extended the option on the same one thousand acre block mentioned above. This new option was for three more years but the purchase price had dropped from \$6.00 to \$3.00 per acre. In the body of this document, No 14532, King Township, it states:

"And Wheras the purchaser is the owner of other lands situated in the Holland River Marsh in the County of York and the County of Simcoe and is endeavouring to devise a plan for the drainage of the said marsh or section thereof and to interest others in the proposal with a view of having the said marsh drained and reclaimed by himself and associates or a company to be formed for that purpose, and whereas, much time and money has already been spent in the said endeavours and for the purpose of enabling the purchaser to carry out the said proposals the vendor has agreed with him as herein set forth."

The option then goes on with the details of the agreement, price per acre, and the other terms. The interesting terminology in the above instrument is the mention of "having the marsh drained by himself and associates or a company formed for the purpose." Day was planning ahead and even though he and his friends involved in the scheme had been turned down by West Gwillimbury and by the Toronto investment dealers he was busily organizing a follow up proposal. When West Gwillimbury Council rejected the petition they suggested that the reclamation project should be undertaken by a private company and Day may well have seen this route as a means to accomplish his goal.

About this time the First World War broke out, Professor Day had his many interests and responsibilities at the Ontario Agricultural College and there was no person in Bradford who was working with him to actively further the cause. For a period of time discussions about The Scheme were set aside.

However, by the early twenties there were many changes. Peace had returned and with it a new active economy. During this interlude, which might be called quiet period, Professor Day had involved a number of his associates, friends and family in his plan. They had become "owners" of marsh properties. While he did not form a company, he organized the new property owners into a new organization with the old name of The Holland Marsh Syndicate. No outline of the formal structure of this organization was found. The 1924 Plan of the Holland River Marsh Drainage Scheme signed by Alexander Baird identifies the "owners" of the marsh lands. Included in this group were Judge R. L. McKinnon of Guelph (one of the originals), D. Paul Munro, later to be the M.P.P. for South Wellington and Alexander Baird, the engineer. Professor Day and his family members owned several properties. From the acreage shown on Baird's 1925 map the Syndicate owned 1894 acres in West Gwillimbury and 2,382 acres in King for a total of 4,276 acres, 61 % of the marshlands.

The members of the Syndicate bought these lands with the expectation that the marsh lands would increase in value when the drainage scheme was completed.

To recover on their investment it was in their interest that the proposed scheme be approved. They were there to support the petition when it was circulated in 1924.

The following comments relate to happenings which fall outside our stated time frame, 1910 - 1930, but they are part of the story of The Syndicate.

In 1932 Clifford Case, the local member of parliament, took the Syndicate to court charging that many of the original petitioners of the Scheme were not land owners. At the same time the Townships presented evidence that the landowners were \$30,000 in arrears in paying their taxes. Professor Day defended their non payment on the grounds that West Gwillimbury had not lived up to their obligations to complete the planned reclamation. The Judge dismissed the case because of conflicting evidence.

The Syndicate continued to have confrontations with the municipalities. In 1935 they took the two municipalities to court for overcharging the costs of the drainage scheme thereby raising their per acre drainage levy. They were successful in their challenge and had their levy rolled back. The papers filed at a 1935 court case show that the members still owned 1,935 acres in West Gwillimbury and 1,735 acres in King for a total of 3,130 acres, 44% of the marshlands (see Appendix C). The accumulated amount of this annual per acre levy was more than some of the new owners had paid for the land in the first place. These were depression times and the owners were faced with the continuing carrying costs coupled with no demand for newly drained marsh lands. Many of the Syndicate members decided not to pay their municipal taxes.

To resolve the problem of tax arrears and ownership the Province passed two pieces of legislation, The Township of King Act (1939) and the Township of

West Gwillimbury Act (1941). These acts gave the townships the authority to adjust their tax rates and to seize the parcels where the taxes were three years or more in arrears. These seized properties were sold at a tax sale. Prior to this legislation and following its passing some lands were sold privately to individual marsh farmers. Professor Day passed away in 1938 and with his passing The Syndicate lost their leader. The series of court decisions which followed and the sale of the properties for tax arrears brought to an end the influence of The Syndicate. However it was not until the mid 1940's that the last of the lands that they held were free from litigation and a clear title could be given. Some of these farms had been tied up with the Syndicate since 1911. Some properties went to farmers while other parcels went to persons who put a plan on the property and subdivided it into five and ten acre parcels which were considered suitable size marsh farms at that time.

Professor Day and the group he formed under the mantle of The Holland Marsh Syndicate took the lead role in setting in motion The Big Scheme. The first group of five had big ideas and looked for investors with deep pockets. This plan was not to be. In due course, the many small investors, relying on Professor Day to look after their interests, followed a more modest plan under the Municipal Drainage Act to finance and implement the Big Scheme.

The Syndicate members provided the support the Professor needed to obtain approval of the Holland Marsh Drainage Scheme. The times that followed, implementing and completing the project, were not good times for the Syndicate members. For most of them the reality of the completed project did not live up to their expectations. They now owned land that was more expensive to carry each year and no more valuable. They were wiser and not as well off financially. In later years, when they drove by the Marsh, and looked over the carrots, onions and other crops, they could tell their family members that they had played a part in helping to create this vast garden from a swamp.

THE FINAL APPROVAL

The formation of The Syndicate by Professor Day in 1911 was an attempt to raise private funds to finance the project as had been suggested by West Gwillimbury Council. When this approach did not bring the response Day had hoped for he turned to financing the reclamation project under the Municipal Drainage Act. Financing the project under this Act did not require that Day and his friends raise the financing to carry out the reclamation. The financing came from money borrowed by the municipality and paid back over time. Day only needed the support of the landowners to sign his petition and vote for the proposal. Since the original refusal by West Gwillimbury, Day had encouraged a number of his associates and friends to invest in marsh land and become landowners. These folks supported him.

He had resigned from the Ontario Agricultural College in 1919 and was working for the Shinn Lightning Rod Company but he kept coming back to Bradford to support the cause. In the spring of 1924, there was renewed interest in the drainage scheme and Professor Day and his family took up residence in Bradford. The plan was about to be implemented.

The renewed interest came about as the result of two happenings.

In the fall of 1923 a new petition was circulated to the owners of the 7,265 acres of marsh land that lay within the limits of the Town of Bradford and the Townships of West Gwillimbury and King. One hundred and five of the one hundred and twenty owners indicated their support for the proposed scheme. Those in support owned 95.5 percent of the land base.

The Big Scheme

Secondly, in January 1924, a new Council was elected in West Gwillimbury, headed up by Reeve J. F. (Frank) Hambly. The Councillors were Lou Neilly, Percy Selby, W. J. Dales and Herman Lennox. This Council was in favour of proceeding with the request from the Marsh landowners.

On Jan 18, 1924, only two weeks after being elected, Council received the Holland Marsh Drainage Scheme petition and they took immediate action. When a drainage works is to be undertaken and the land is situated in two municipalities, the land owners may petition either township to ask them to undertake the work. In this case West Gwillimbury was the township that was petitioned and the Council that was receptive to the concept.

At this West Gwillimbury Council meeting on January 18, 1924, By-law No. 592, a by-law to start the approval process, was passed. The By-law read as follows:

"A by-law of the municipal Corporation of the Township of West Gwillimbury to provide for the appointment of an engineer under the provisions of the Municipal Drainage Act.

Whereas a petition under the provision of the Municipal Drainage Act of two thirds in number of the resident and non-resident owners, exclusive of farmers sons(not actual owners) as shown by the last revised assessment roll of the lands set forth in the said petition and known as part of the Holland River Marsh, praying that the said lands may be drained, reclaimed and brought into a state permitting of cultivation and usefulness, as therein more fully set forth has been this day presented to Council of the Municipal Corporation of West Gwillimbury.

And whereas the said Council are of the opinion that it is desirable to appoint an engineer to make an examination under the said Act of the said area proposed to be drained and of the south portion of the Holland River and to prepare a report, plans, specifications and estimates of the drainage work and to make an assessment of the lands and roads within said area to be benefited, and of any other lands and roads liable to be assessed.

Therefore the said Municipal Council of the Corporation of the Township of West Gwillimbury pursuant to the provisions of the Municipal Act enacts as follows:

- Alexander Baird, Ontario Land Surveyor, is hereby appointed as Engineer to make the said examination, and to prepare the said report, plans specifications and estimates and to make the said assessment.
- The said engineer shall be paid for his services, a reasonable remuneration, and if any dispute arises as to the amount the same shall be referred to and the amount determined by George W. Henderson Esq. Drainage Referee."

Signed J. F. Hambly
Reeve

Signed and Sealed Fred Ritchie

Clerk-Treasurer

Baird proceeded with his examination of the marsh, preparing the plan of the work to be done, the costing study and his final report. His report was presented to West Gwillimbury Council on June 19, 1924. His report included a map entitled:

PLAN SHEWING LOCATION OF DREDGE CUTTING AND EMBANKMENTS AND LANDS ASSESSED IN THE CONSTRUCTION OF PART OF S. PART OF THE HOLLAND RIVER MARSH DRAINAGE SYSTEM TOWNSHIP OF WEST GWILLIMBURY and TOWNSHIP OF KING COUNTIES OF SIMCOE AND YORK.

Alex Baird, C.E & O.L.S.

Sarnia, 19th June 1924

A reduced copy of this map is shown here as Map B. Appendix B provides more details about the ownership and the changes of ownership from the similar map (Map A) that Baird prepared in 1911. Most of the new owners were members of The Holland Marsh Syndicate.

A statutory meeting to consider the report was held on July 5, 1924 and the report and the necessary by-law were approved by Council on August 2nd 1924. This by-law, No. 595 A, provided the authority for the Townships of West Gwillimbury and King to debenture the funding for the project. By-law 595 A is still in effect to-day.

The preamble to the by-law reads as follows:

"A by-law to provide for drainage work in the Township of West Gwillimbury in the County of Simcoe and in the Township of King in the County of York and for the borrowing on the credit of the Corporation of the Township of West Gwillimbury the sum of \$52,281.00, the proportion to be contributed by the said corporation for completing the same."

The financing of The Scheme was considered a local improvement, those who would benefit from the completed works would pay. The tendered price was \$137,000, of which \$52,281.00 was West Gwillimbury's share. \$76,663 was to be provided by the landowners of King while Bradford had to raise \$ 1,825.00.

To raise this amount the municipalities sold debentures, or borrowed the money, to pay the construction costs, plus the cost of borrowing, the interest. The owners of the lands in The Scheme would repay the debentures over the next thirty year based on a per acre per year assessment. This gross amount was eligible for a 20% grant from the Ontario Government under the Municipal Drainage Act.