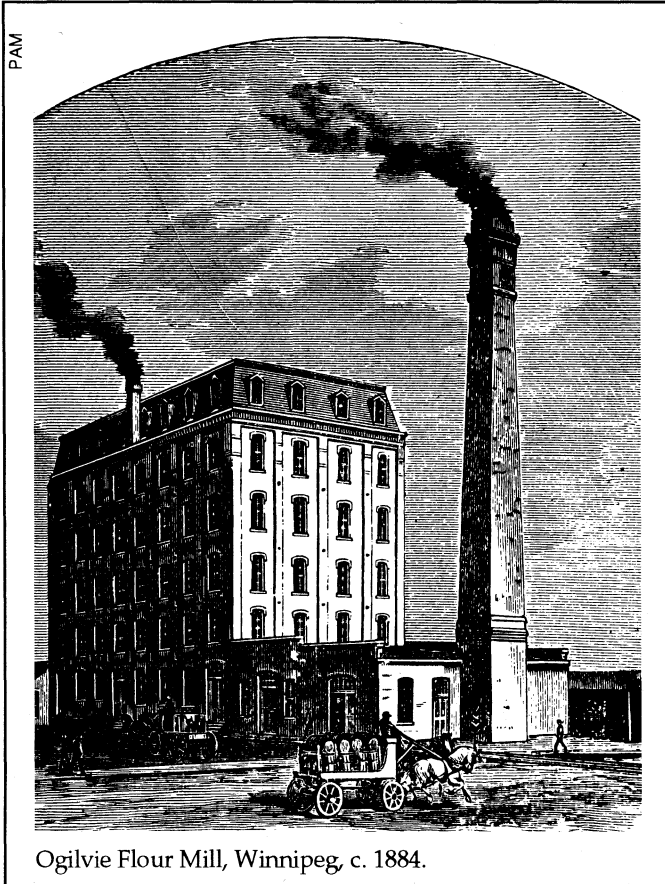


# The Flour Milling Industry in Manitoba Since 1870

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Ogilvie Flour Mill, Winnipeg, c. 1884.

**T**he flour milling industry helped build the economic landscape of Manitoba in two distinct ways. First, several of the major “extra-regional” concerns such as Ogilvie Flour Mills, The Lake of the Woods Milling Company [LoFW], Western Canada Flour Mills, and Maple Leaf Mills developed an important provincial “presence” in the form of large milling operations and lengthy elevator “lines.” Although these companies, sometimes known as “merchant mills,” had their head offices and controlling interests outside the region, they were instrumental in the integration of Prairie agriculture into the world economy.

Second, many small “custom” milling companies operated, principally servicing local districts although at times also producing flour for export to other areas of the Prairies or Canada, and even the rest of the world.<sup>1</sup> Usually they were begun and built by local entrepreneurs, and therefore constituted a different kind of company-type than the “line” milling operations. Originally, they served mainly the population that was migrating onto the Prairies

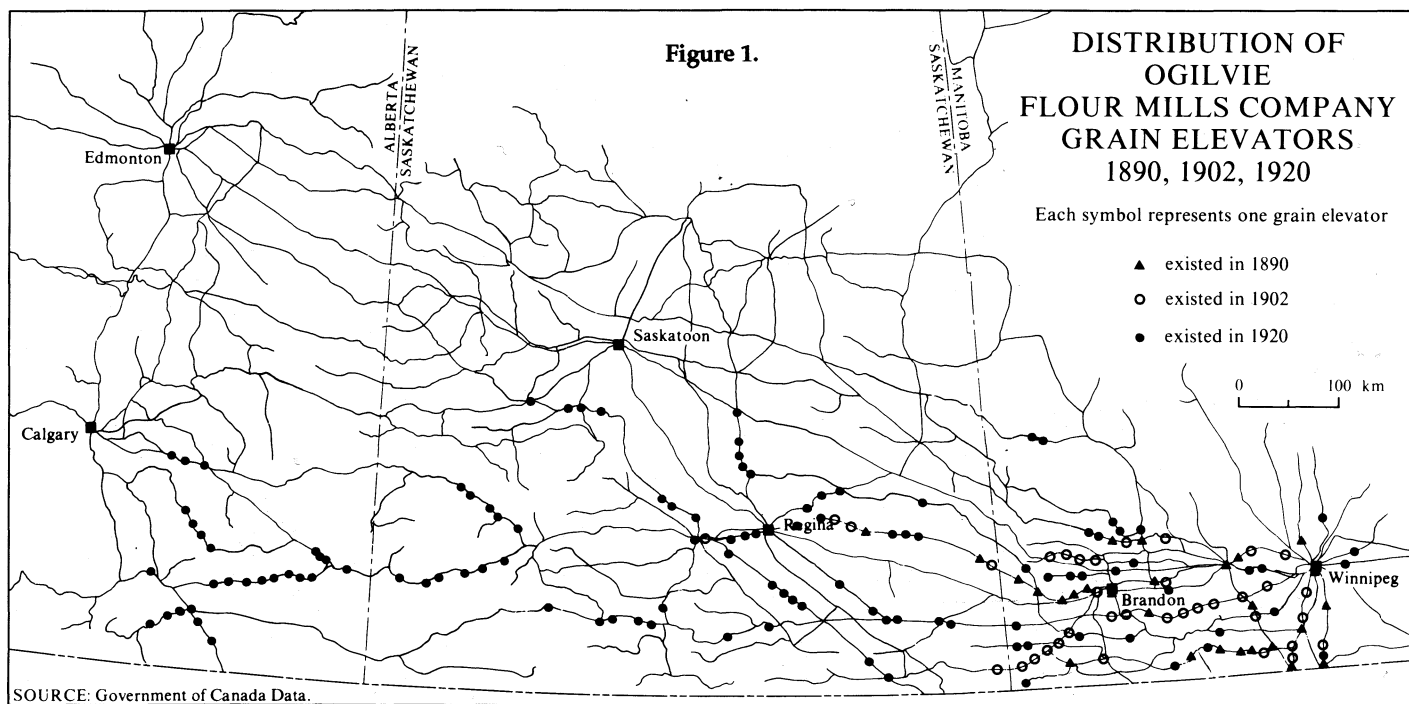
in order to engage in agriculture. In rare instances these mills were supplied by small lines of elevators.<sup>2</sup>

Although the production of wheat in Manitoba dates back to the early days of Lord Selkirk’s Red River Settlement,<sup>3</sup> exports were not initiated until three quarters of a century later, when a demand for Prairie wheat had been demonstrated and a means of supplying it provided. This demand did not come until wheat was needed as a milling grain in Ontario and Quebec, and until it was revealed that Red Fife wheat could be successfully grown in Manitoba. Red Fife wheat had not originally enjoyed favour with millers because its flinty kernels would not produce the kind of flour desired. In the 1870s, however, the La Croix “purifier” and the gradual reduction process were introduced, and together these brought about “a veritable milling revolution,”<sup>4</sup> leading to larger, lower-cost structures that produced a superior product.<sup>5</sup> These changes were incorporated into Winnipeg mills in 1882,<sup>6</sup> gave impetus to the demand for spring wheat, and brought the crops of the Manitoba and the Dakotas “into high favor.”<sup>7</sup>

Flour initially remained, however, a product for the local market, as well as for the incoming settlers and the railway construction gangs who were moving westward. But in 1877 a consignment of Manitoba wheat was shipped to the Goderich, Ontario, mill of the Montreal firm of A.W. Ogilvie and Co.<sup>8</sup> Other sales followed,<sup>9</sup> and by 1878 buyers for the Ogilvie company were themselves in Manitoba.<sup>10</sup> The demand for Manitoba wheat had been generated, but the supply side was still weak: steamboats could export only so much. It would, however, be transformed by the coming of the railway, first from the south (1878) and later from the east (in the early 1880s). As a consequence, although in “1884 the grocery and provision trade showed the largest aggregate of business, [by 1886 it had] given place to grain, grain products and milling.”<sup>11</sup> In 1885 came the first overseas export of flour from western Canada, an Ogilvie shipment to Glasgow, Scotland,<sup>12</sup> and by 1886 Winnipeg flour was replacing American flour in the British Columbia market.<sup>13</sup> With its export orientation, flour milling in Manitoba was entering a new phase and was to expand considerably over the next forty years, before entering further periods of adjustment that were to again transform the industry in the 1930s, 1940s, and 1950s.

## THE GROWTH OF THE EXTRA-REGIONAL COMPANIES

Eastern Canadian flour milling interests were attracted to Manitoba for two major reasons. First, wheat farming in



Ontario "was failing," and the millers needed a new source of grain. Second, although local expertise in the grain trade began to grow in the late 1870s, it was still only a sideline for most of the Winnipeg businessmen involved, as the real estate business, and even the lumber business, seemed more rewarding until the early to middle 1880s.<sup>14</sup> The experience of A.W. Ogilvie and Company is the best example of the entry of an extra-regional flour milling company into the Prairies, and this company's history will be discussed in the most detail, although other major Canadian milling companies had similar experiences.

The Ogilvie flour milling empire had its origins in Quebec in 1801, and a series of mills in Quebec and Ontario followed. The W.W. Ogilvie Milling Company, the western subsidiary of A.W. Ogilvie and Company, built its first line elevator in Manitoba in 1881,<sup>15</sup> and constructed its 1,000 barrel roller process Winnipeg flour mill in 1882. (Not to be outdone, the McMillan and Hudson's Bay Company mills converted immediately to the roller process.) A line of elevators was then constructed, through districts that produced the best milling grades of grain, as an early part of a pattern of vertical integration by the Ogilvie company across the Prairies. It was designed to guarantee a supply of milling-quality flour to the Winnipeg operation which, if running at full capacity could use 1,000,000 bushels of wheat annually.<sup>16</sup> As one manager of Ogilvie company in Winnipeg put it "... the matter of selection and accumulation for future use, of grain of suitable quality for our milling requirements, makes a line of interior elevators of our own a necessary adjunct to business."<sup>17</sup> These elevators also served a retailing and wholesaling function in the distribution of the Ogilvie products to Prairie customers, as well as "intelligence

centres" from which the company kept itself informed about the quantity and quality of crops in the Prairies. It was clear that milling in Canada, as in the United States, "was no longer primarily a trade but had become a business."<sup>18</sup>

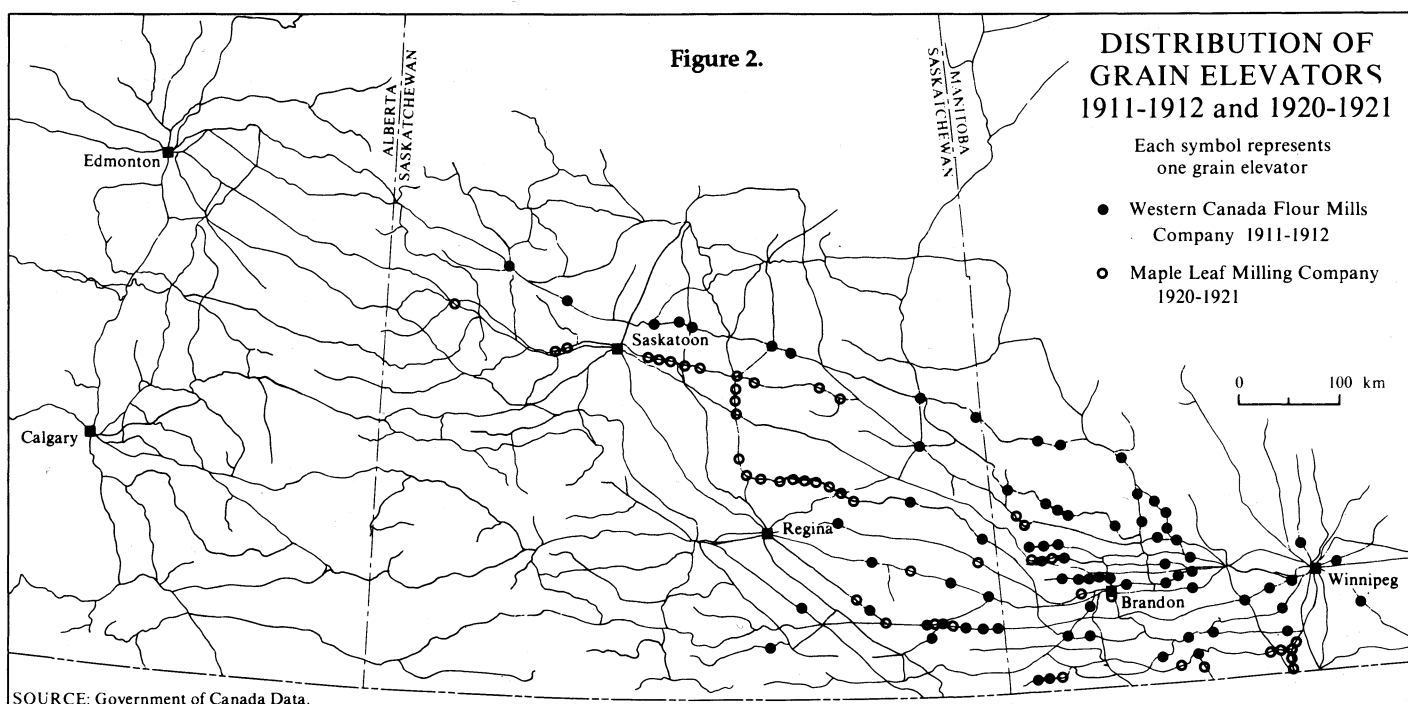
The construction of Ogilvie's line of elevators was a result of the solicitation by the Canadian Pacific Railway (CPR) the general manager of which, Sir William Van Horne, had learned through his American experience that such a programme could create traffic for the railway.<sup>19</sup> In order to encourage the Ogilvie company to extend its line of elevators the CPR gave "rebates" to the miller based upon the amount of flour shipped to the Lakehead to act as a return cargo for the CPR's new lake steamers. How long these rebates lasted is unclear, but some were given as late as 1888. Although complete detail on these rebates is lacking, they were sufficient for Ogilvie's to afford the cost of eight new elevators in 1885 (at which time the company owned a total of twelve "houses," in addition to eight "flat warehouses").<sup>20</sup>

Ogilvie Milling's success was also said to be the result of practices that were not in the farmers' interests. For instance, a number of issues with regard to pricing arose. As a matter of policy, the Ogilvie company attempted to keep secret its prices, which apparently varied from place to place, even on the same date. A furore erupted in the fall of 1884 when a CPR telegraph agent released information to the newspapers on the prices Ogilvie was offering. In the same year the company's buyers were found to be offering prices lower than those agreed upon in the rebate agreement and the CPR had to step in to rectify the situation. The Ogilvie company, and later the other large milling companies, were also criticized because they were believed large

enough to be able to affect the overall price of grain, which led to Manitoba farmers receiving a lower price for their wheat. Basically the argument was that the large millers were able to "cull" the better grades of wheat by the use of their own elevator lines, and by "somehow selecting the best car lots" collected by other elevator owners, before they were able to reach the market. Thus the average grade marketed elsewhere was lower, and the average wheat price, based upon overall sales, was lower. This lower price was received by the farmers.

This accusation was, of course, difficult to substantiate, although the fact that up to 1889 "Mr. Ogilvie [had] purchased more than half of all the wheat grown in Manitoba and the North-West Territories" gave some credence to it.<sup>21</sup> In addition, the large millers were accused of spreading false reports about crops in order to lower prices, and of exploiting the grading system for wheat in order to buy the grain at prices below true value. There were also complaints about grading and docking. Both of these processes involved judgement calls on the part of elevator operators -- thus the farmers had little control over them. This was particularly a problem at points

should avoid making a judgement based only upon present-day codes of business ethics if one wishes to understand fully these actions. It should be recognized that apart from the short run problems associated with the staples economy, and the fact that the years from 1885 to 1896 were poor agricultural years for the prairies, the Company was at this time in direct competition with US based organizations which were also unrestrained by rules and regulations. As a consequence Ogilvie milling believed that it had to operate very frugally -- and "unfairly" -- in order to survive. In 1885, for instance, the Ogilvie firm was involved very competitively with the Pillsbury company from Minnesota, and a flourishing trade in derogatory "advertising sheets" had each miller trying to prove that his flour was of superior quality.<sup>23</sup> In 1886 "Mr. Pillsbury admitted ... that his firm had for a long time earned no profit on flour exported to Europe," having dumped it in this market (and in Canada!) "for what it [would] bring."<sup>24</sup> In 1887 the intensity of United States competition forced the Ogilvies to close all four of their mills temporarily, and as these mills held two million bushels of wheat at the time, the Ogilvies were accused of attempting to "corner the



where Ogilvie Milling had the only elevator, and in some instances (e.g. at Manitou in 1884) led to the local farmers building their own elevator. As competition increased in the late 1880s and early 1890s, however, the specific criticism of the Ogilvie company seems to have disappeared, although "the large western milling companies" were still subject to attack two decades later.<sup>22</sup>

Although these issues make one suspect excessive greed on the part of the Ogilvie family, and this was certainly the opinion of the contemporary farmers, one

market." To make the lives of Canadian millers more difficult, between 1876 and 1886 the Minneapolis Millers Association maintained an extensive line of elevators in Minnesota and North Dakota through which participating millers bought wheat supplies at prices often considered distressingly low by farmers and their recently organized farm organizations, allowing these millers at the same time an unfair advantage over their Canadian counterparts. Perhaps the best evidence for the stance taken by Canadian farmers is presented by the reforms that later

took place in the system as a result of government intervention and cooperative farmer action. Similar changes dealt with the worst abuses in the U.S., several years earlier than in Canada. Indeed the reforms south of the border became a model for those to the north. It should, however, be recognized that the existence of the Ogilvie elevator system, and of those put in place by other line companies, did have some advantages for the farmers, particularly in terms of reliable marketing. On balance, however, the major elevator owning companies were probably more successful than the farmers in exploiting the circumstances available to them.<sup>25</sup>

The rise of the Ogilvie "empire" mirrored (and of course, to some extent caused) the growth of the Canadian national trade. This success is indicated by the growth in the company's early milling capacity. In 1890 the capacity of the Winnipeg mill was 1,800 barrels (bbls) per day, and in 1900 it was 2,500 bbls, but in 1909 Ogilvie Milling built the "biggest mill in the British Empire" and "probably the biggest in the world" at its Point Douglas (Winnipeg) site, increasing production from 4,000 to 8,000 barrels per day.<sup>26</sup> A 2,300 bbls plant in Medicine Hat was built in 1913, and a mill in Edmonton was purchased in 1923. With its successful responses to the various challenges the Ogilvie Flour Mills Company (it had been renamed in 1902) grew nationally large enough to be able to compete with the largest American concerns and to hold a "towering position among its rivals" in Canada by 1918 at the latest.<sup>27</sup>

In the 1920s, the Ogilvies, along with the other large milling companies in Canada expanded into the bakery trade, and other flour-related businesses, in order to help guarantee an outlet for their flour.<sup>28</sup> The company also expanded its operations in Alberta, and by the mid-1940s had more capacity in this province than in Manitoba. Today the flour mill in Medicine Hat is the only one owned by Ogilvie Milling that is still operating in the prairie Provinces; the Winnipeg mill was closed in 1989.<sup>29</sup>

The successful growth of flour milling in Canada came in part because of the quality of the product, but also in part because of the success of the system employed by the large companies to gain control over all aspects of the industry, and thus lower production costs. For the Ogilvie company (and others), this included establishing its country elevator system, which gave it complete control over the quality and quantity of grain it purchased and also eliminated the need to pay other middlemen to handle this grain.<sup>30</sup> Thus, from its first (Gretna) elevator built in 1881, Ogilvie gradually built a line of storage structures (Tables One and Two); originally both flat warehouses and elevators were built, but over time the number of warehouses was reduced (to zero by 1900). This pattern of warehouse reduction was typical of, but in advance of, most of the rest of the industry. Although these figures reveal considerably less than the monopoly position suggested by many farmers, other factors have to be taken into account. There were the regional concentration of Ogilvie elevators (mostly on CPR lines in southern Manitoba (Figure One), the presence

of single elevator points, the existence of other large line companies holdings (after 1888), and the small size of the competition, at least in the early years (Table Two).<sup>31</sup>

But perhaps the best index of the influence of Ogilvie Milling (and of the Lake of the Woods Milling Company) is the fact that their success later compelled the smaller companies to amalgamate into syndicates such as the Northern Elevator Company and the Dominion Elevator Company in order to survive (Table Two).<sup>32</sup> Only a few stations had "Farmers'" elevators, and these were all separate joint-stock companies, not under a unified management.<sup>33</sup> Because virtually none of the small companies owned more than two or three structures, they had little chance of exerting any control in the industry. In 1900 the largest six companies owned over 70% of the elevators with the farmer-owned structures making up only 6% of the total.<sup>34</sup> The Ogilvie company continued to increase its holdings with the total peaking at 170 in 1920 (Figure One) -- until the takeover of The Lake of the Woods Company in 1954 when this company's elevators were acquired.

During these years of growth the major milling companies, including Ogilvie Milling, continued an aggressive policy in order to continue its advantage in the market. For instance, although the milling companies professed "no objection" to the development of a Manitoba Government owned system in 1910, their actions contradicted their words. They refused to sell any elevators to the Manitoba Elevator Commission, and the companies' influence is reflected in the fact that they were virtually unaffected by the government expropriation proceedings. The millers were able to pay premium prices for milling wheat, which the government system could not economically match, and in addition, they used this ability to actively sabotage the government system; in some places milling companies gave track prices for street wheat and the government men could not compete.<sup>35</sup>

The distribution of these elevators reflected the spatial and temporal growth of the overall system (Figure One): most were in the southern Prairies (72% in Manitoba for instance), with over 86% being on CPR lines in 1911. This pattern may have reflected a reciprocal agreement between the railway and milling companies, but in addition the CPR lines were located in the most settled areas during the early growth stages of the flour milling industry. Although these patterns changed somewhat as Alberta and Saskatchewan were settled more intensively (only 41% were in Manitoba in 1923), over 90% of the Ogilvie elevators were on the CPR when the company's "line" of elevators reached its peak size in the early 1920s. The close relationship between the CPR and Ogilvie declined as the CPR began to depend on other sources of supply (e.g. other elevator companies and then the Wheat Board<sup>36</sup>), and as the Ogilvie company made the decision to concentrate on being a flour milling operation and not a line elevator company.<sup>37</sup> In October 1959 its remaining 224 elevators were sold to the three Pools "for the purposes of better capitalization."<sup>38</sup>

The Lake of the Woods Milling Company, with its head office also in Montreal, began construction of a 1,200 barrel per day capacity mill at Keewatin, Ontario in 1887, completing it the next year,<sup>39</sup> and enlarging it to 2,000 barrels by 1896. The mill was soon to be supplied by its own line of country elevators (Tables One and Two).<sup>40</sup> A second, 300 barrel, mill at Portage la Prairie, Manitoba, was purchased from Portage Milling in 1892 and enlarged to 700 barrel capacity by 1896, to 850 by 1900, and later to 1,500 bbls.<sup>41</sup> A 600 barrel per day mill was later bought in Medicine Hat, as LofW also expanded into Alberta. In addition a number of bakeries were established to give the company a domestic forward linkage that could use its flour production. Despite Van Horne's advice, the LofW did not immediately build or buy a line of elevators,<sup>42</sup> and in fact turned down some offers of existing structures from individuals and companies in Manitoba.<sup>43</sup> However, it soon recognized the error of its ways and constructed elevators. Its system then showed a similar pattern of growth to that of the Ogilvie company, peaking in 1924, and then declining to below 100 in the early 1950s. Its spatial distribution was also similar to that of Ogilvie Milling — 66% of its 1911 elevators were in southern Manitoba, mostly (91%) on CPR lines, perhaps reflecting the fact that George Stephen and Sir William Van Horne were among the original subscribers to its share capital. The company was sold to Ogilvie Milling in 1954 although its elevators continued to be licensed under the Lake of the Woods name until they were sold to the Pools in 1959.

These two companies dominated the milling trade until 1905 when Maple Leaf Mills and Western Canada Flour Mills [WCFM] were organized. Maple Leaf Mills dates back to the 1830s, but Maple Leaf Flour Mills Company (the Prairie subsidiary of the Toronto-based corporation) was formed in 1905.<sup>44</sup> It built a mill at Kenora, Ontario in 1906, and bought or built a line of elevators long the CPR (Table Two and Figure Two), including the 600 (later 350) barrel per day Wheat City Flour Mill in Brandon (built in

1901), and a 750 barrel mill (later 1,800 bbls) at Medicine Hat that opened in 1915.<sup>45</sup> By 1921 Maple Leaf had overtaken LofW to become the second largest company in Canada, although most of its capacity was in Ontario.<sup>46</sup> Some elevators were disposed of and others purchased or built over the next decade, with the total peaking in 1924 (all still on the CPR in Manitoba and Saskatchewan). Some attrition then occurred with the bulk of its 59 country elevators being sold to Federal Grain in 1929. The company expanded into the bakery trade (and other flour-related businesses), as did the other major Canadian millers, as a way of guaranteeing a market for some of its flour. Maple Leaf Mills lost its Manitoban presence after the Brandon mill ceased operations in 1926 and its line elevators were sold. It did not reappear until 1951 when it bought the assets of Western Canada Flour Mills.

Western Canada Flour Mills was formed in 1905 from an amalgamation of Manitoba and Lake Huron Milling Company, which owned a mill (built in 1872 by Ogilvie) at Goderich, Ontario, and Kelly Milling Company with a mill (built in 1884) at Brandon.<sup>47</sup> Its head office was located in Ontario. The Brandon mill was later closed (in 1932), but a 5,000 (later 5,500) barrel mill was opened in St. Boniface (Winnipeg). By 1911 the company had 68% of its elevators in Manitoba (Figure Two), the total peaking at 96 in 1920.<sup>48</sup> In contrast to the other three major milling companies, over half of its elevators were on Canadian Northern (later Canadian National) Railway lines, due to a corporate connection between these two organizations.<sup>49</sup> Bakery operations were also used by this company to market some of the flour produced by the company. WCFM disposed of many country elevators during the 1930s, sold its 38 remaining structures to various grain companies in 1938, and changed its name to Purity Flour Mills Ltd. in 1945. In 1951 this company was sold to Maple Leaf Milling, and its St. Boniface mill was closed in 1981.<sup>50</sup>

These four major milling companies were critical elements in the Manitoba economic landscape not just



Ogilvie and Lake of the Woods Milling Company elevators at Winkler, 1916. The Winkler railway Station is in the foreground.

because of their demand for wheat, but also as a result of their lines of elevators. In total, they accounted for over 19% of Prairie elevators and warehouses in 1892, over 22% by 1900, and over 18% in 1902, by which time the other line elevator companies were becoming relatively more significant. This percentage dropped to 16.5% in 1911, and 10.4% by 1924, but these were proportions of a much larger total: there were 421 elevators in 1900 but the number had grown to 4,208 in 1924. In 1900 the "big two" milling companies owned 94 elevators, in 1924 the "big four" had 436 of these structures -- which constituted 89% of the major Prairie millers' elevators. In addition to these "major operators," however, there were many smaller players in the flour milling industry of Manitoba.

### CUSTOM MILLING IN MANITOBA

The export of Manitoba flour after 1885 inaugurated several decades of expansion for the hard spring wheat mills of the Prairies. Although the large milling companies clearly had a major economic impact on the Prairie region as a whole, the smaller custom mills were arguably of greater relative significance to their local economies because they were designed to serve their neighboring communities rather than cater to extra-regional shareholders.<sup>51</sup> The small mills not only purchased grain from nearby farmers, and thus stimulated the surrounding region, but they also produced a commodity that satisfied a local need and created business for a railroad on a year round basis. In addition they were a source of regional employment, and thus helped to develop their towns. The water powered grist and roller mill established in 1881 at Plum Creek, and later taken over by Herriot and McCulloch is, for instance, credited with being the focus around which the town of Souris formed.<sup>52</sup> These mills were certainly perceived by the people of Manitoba as significant, if not essential, to the growth and development of the areas around them. The flour produced, such as "Prairie Lily" in Souris, "Turtle Mountain Maid" in Holmfild, "Gold Nugget" in Deloraine, and the "Prairie Dawn" brand sold by Kent mills in Virden, also advertised and gave some regional identity to these settlements.

Purchasing "imported" (i.e. non-local) flour was expensive, and deemed unnecessary in a region that overwhelmingly produced milling wheat — an understandable sentiment. Although the major milling companies did sell flour through their lines of elevators, not every settlement had easy access to these lines, many settlements were not yet served by a railway, and many people believed that an element of competition might lower the prices demanded.<sup>53</sup> In addition, most early Prairie farmers were cash poor and could not easily purchase even reasonably priced supplies. For them gristing was the answer, as it had been for so many other farmers around the world for centuries, and most of the small mills were advertised as grist mills. Gristing involved farmers taking their own grain to the mill to be made into flour. Payment was made by giving the miller a portion of the flour in return for his

service. *The Commercial* (of Winnipeg) is replete with references to the construction of grist mills at this time. Larger structures, such as a 200 barrel mill built by McCulloch and Herriot at Souris in 1882, were referred to as "grist and flouring mills."<sup>54</sup>

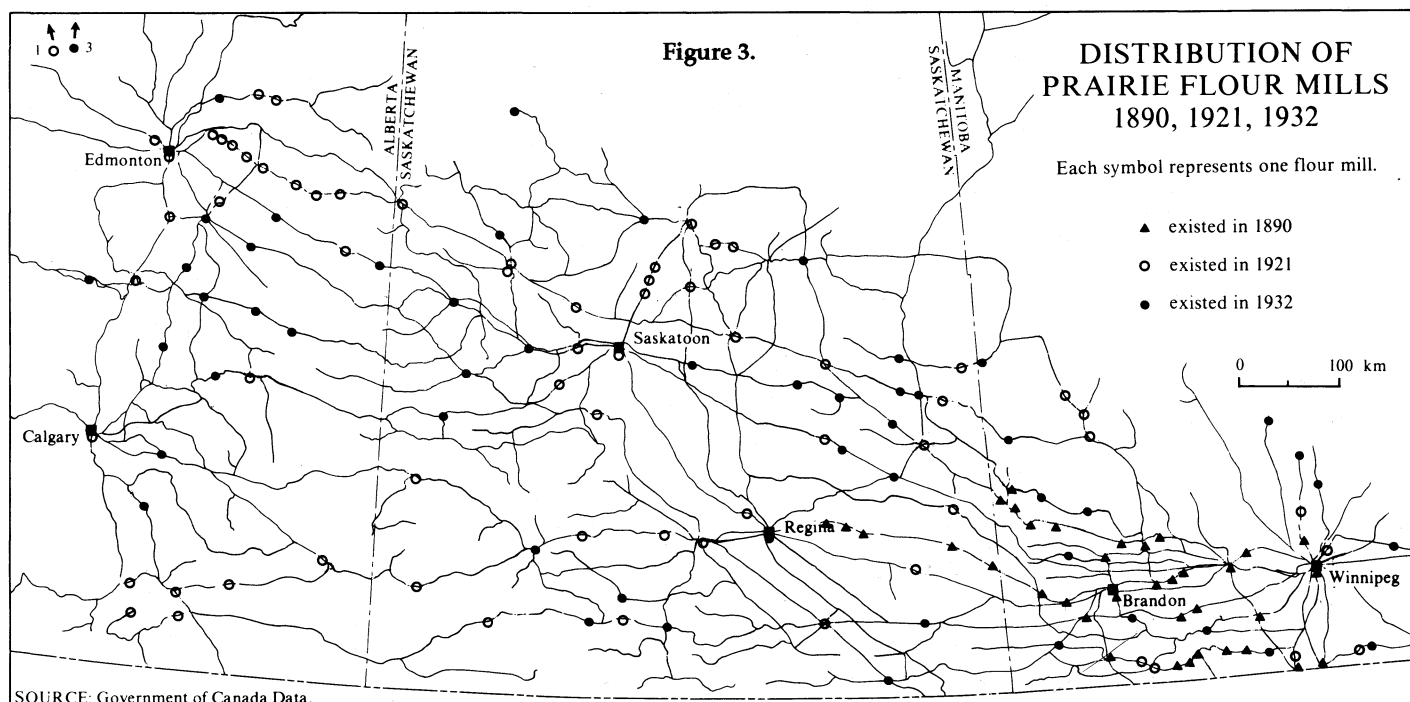
But demand did not inevitably lead to supply, especially when the new, more expensive, roller technology became available in the early 1880s. Consequently "bonuses" were offered by towns, villages, and municipalities in order to attract millers to, or keep them in, their communities.<sup>55</sup> The bonuses were designed to increase the overall supply of mills, but they may have also affected the distribution, by attracting a miller to one settlement, and thus crushing the hopes of a competing neighbour. The bonuses most commonly took the form of cash (up to \$6,000 in some cases), which sometimes had to be repaid with interest. In other instances tax exemptions (for up to twenty years) were given, and elsewhere free land might be included. The amount of the bonus was sometimes variable — often being dependent upon the capacity of the mill that was to be constructed — and many of the packages seemed very attractive. Between 1882 and 1890 at least two dozen bonus offers were made in Manitoba. In 1890 there were 22 small mills across the province, nine of which may have resulted from the bonusing system (Figure Three).<sup>56</sup>

In some instances groups of "concerned farmers" formed joint stock companies to build flour mills that could both provide a local food supply, and also act as a market for grain. Although these companies may, on occasion, have also used the municipal bonuses, it would appear that they were most commonly formed where bonusing had not successfully attracted milling entrepreneurs. For the offer of a bonus clearly did not always lead to the construction of a mill. If nine bonus attempts were successful by 1890, clearly more than that number were not. Several of the communities which unsuccessfully offered bonuses did have mills by 1896, perhaps a belated result of the bonus offer, but many communities were to have no luck at all.<sup>57</sup>

The bonus system does appear to have achieved growth in the overall number of Manitoba mills, at least in the 1880s. In 1881, there were only twenty five flour mills in Manitoba and the Northwest Territories, with probably six of them in the Winnipeg area. The balance were scattered from Emerson (south of Winnipeg) to Prince Albert and Battleford (in present-day Saskatchewan), but reflecting population distribution and the pattern of settlement development, they were concentrated in Manitoba.<sup>58</sup> By 1890, there were 68 small mills on the Prairies (74% in Manitoba), and by 1900 the number was still around 65, despite the significant declines exhibited elsewhere in the country. These were still dominantly (74%) Manitoban in distribution, although extending as far west as Edmonton, as Prairie settlement moved in that direction.

However, in the 1890s further changes occurred which were difficult to overcome through bonusing. The price of





wheat dropped, and battles over freight rates took place which eventually made it more profitable to transport "raw" wheat than "manufactured" flour. This led to hardships especially for small scattered mills, and to the consolidation of milling in a few strategic locations, although these changes were more noticeable in the established areas of eastern Canada than in the growing West.<sup>59</sup>

The average daily capacity of the small Manitoba mills ranged between 100 and 110 barrels during this time period (the mode was 100 bbls), compared to an average for the large (extra-regional) mills that rose from over 660 barrels in 1890 to over 1,200 barrels in 1900, and nearly 1,800 bbls in 1921. Most of these small mills were roller mills, the new technology having rapidly extinguished the old, or having driven it farther into the frontier where it still could be economically used. Stone process mills were still, for instance, being constructed in Saskatchewan in the early 1890s. The machinery used in some of them had come from Manitoba where it had been replaced by roller technology. Some machinery made more than one such move as the frontier advanced.<sup>60</sup>

But as the high quality of Manitoba wheat — particularly for milling — became recognized around the world, Canada's large export trade in wheat and flour developed, and the milling industry attained a capacity well beyond the need of the domestic market.<sup>61</sup> Before the dawn of the twentieth century, exports had become significant to the national industry and were already critical to the Prairie producers, with over 90% of production needing to find an "outside market" in 1896.<sup>62</sup> Nationally, although only 5% of Canada's flour production was exported in 1881, this proportion had risen to over 10% in 1901, and to over 15% by 1911. These changes did not augur well for the custom

mills in Manitoba, which found it increasingly difficult to compete.

In addition, the overall complexion of Prairie agriculture had changed, reflecting the continued expansion of Saskatchewan and Alberta after the settlement frontier had passed through Manitoba, and this had predictable effects upon the number and distribution of small mills, as well as those owned by the line companies.<sup>63</sup> Saskatchewan produced more wheat than Manitoba by 1909, had more grain elevators by 1910, and a greater rail mileage by 1912. By 1916 Alberta also produced more wheat than Manitoba, had surpassed the latter province in railway mileage in 1917, and had more grain elevators by 1918.<sup>64</sup> The number of flour mills is harder to gauge, as data is missing or inadequate or inaccurate for many critical time periods, but the best indications are that the number of mills in Manitoba began to drop in the early 1900s. In 1900 there were perhaps 48 mills in the province, and in 1911 there were 36. Some of the mills that closed were able to sell at least their elevator facilities to other companies. Thus the Echo Milling Co. sold their Gladstone plant to N.M. Paterson c.1920, and the Winkler Milling Co. sold to Jas. Richardson and Sons c.1930. Other owners were not so lucky. Dow Cereal Milling (in Neepawa), Deloraine Milling, and Hamiota Flour Mills all disappeared (by closure, or perhaps even fire) with no successor companies apparently taking over their facilities.<sup>65</sup> There were probably more flour mills in Saskatchewan than in Manitoba by 1912, and more in Alberta by the end of the decade [Figure Three]. The war of 1914-18 gave a great impetus to the flour milling trade, although it had a greater relative effect on Alberta and Saskatchewan where the potential for local growth was much greater. But profits from flour milling

were such that the smaller mills probably found "difficulty in surviving" once the war was over.<sup>66</sup>

Despite these structural changes, the flour milling industry was the most important form of regional manufacturing in the early 1920s, topping the list in all three Prairie Provinces, although it had dropped to second in Manitoba before the end of the decade.<sup>67</sup> The Manitoba market was still, however, perceived as a valuable one. The Kent family, for instance, which now operates a mill in Virden, built a mill in Somerset in 1927, moving to Manitoba from Outlook, Saskatchewan. The family had previously milled for decades in Ontario. The Virden mill was opened in 1934, with the Somerset mill being sold in 1947, and burning soon after. Despite the adverse effects of the Depression on the export industry, there was a brief revival of custom milling in Manitoba during the 1930s, although the industry was only the province's third biggest in 1936 and fourth biggest in 1938. In fact the hard times of the 1930s seemed to have helped the custom milling industry by making economies of all kinds necessary; because locally gristed flour was cheaper than standard brands bought at the local store, flour milling apparently flourished.<sup>68</sup> The Harrison Mill at Holmfield, Manitoba, for instance, worked at maximum production during the lean years of the thirties. It is unlikely, however, that these mills were all profitable, and many operated only sporadically, with the owners having other jobs or businesses to supplement their income.

A further impetus to the industry leading to increased exports was the Second World War, and particularly the demands from Great Britain and the other allied countries. In each year from 1942-1950 more Canadian flour was shipped than during the previous peak year of 1923. Much of this was shipped out of the custom mills which worked day and night, producing amounts never since achieved. Many custom mills, such as Harrison Milling at Holmfield, exported (and indeed, reached peak production) during the war, running at full capacity for long periods of time. After the immediate post-war years there was a decline in flour exports, as former markets had "largely developed their own milling capacity."<sup>69</sup> Flour milling was no longer ranked in the top forty industries in Canada by the late 1960s.<sup>70</sup>

Harrison Milling is a classic example, and perhaps the classic example, of a "custom" flour milling enterprise on the prairies.<sup>71</sup> The company was founded in 1878, is still in operation as the oldest operating independent prairie flour mill, and has consequently experienced — and survived — the various changes and upheavals that have occurred in the industry over the past century.

The Harrison family came to Manitoba from Mitchell, Ontario. Matthew, who arrived in 1875, was a millwright by training, and after constructing several mills in other areas of the province he, along with his brothers George and William, built their first stone process flour mill at Wakopa, which was strategically located at the junction of the Boundary Commission Trail and the Missouri Fur

Trail, in 1878. Machinery was shipped from Stratford, Ontario by ox-cart along the Boundary Commission trail to the Harrisons, with the mill stones (from France) arriving in the same fashion.<sup>72</sup> This flour mill, which was the first in the local area, was burned, but was rebuilt almost immediately. The mill was successful until 1885 when the rail line was built through nearby Killarney. George and William relocated and built the first grain elevator in Killarney, but only ground feed because apparently another miller had already been promised a mill location in that town.<sup>73</sup> There is, however, no evidence of a flour mill existing in Killarney until 1892 when Young Bros. and Buck built one, although the town did offer (in 1886) a free site, and exemption from taxation for nineteen years, to somebody who would build a 100 barrel (minimum size) flour mill in the settlement.

In 1892 the Harrisons built a 30,000 bushel elevator in Holmfield, and leased two others at Cartwright and Mather from a local farmer. In 1897 they sold the Killarney structure and centred their operations in Holmfield, which lay on the newly opened Pembina Mountain section of the CPR (with the Greenway-Adelpha branch of the Canadian Northern Railway being built through the settlement in 1905). They were given a \$2,000 bonus (out of a total cost of \$20,000) by the Rural Municipality, to build a steam-powered flour mill (burning coal and wood), apparently using roller processing from the start and beginning operation in 1897.<sup>74</sup> The Harrison Brothers mill, constructed distinctively of field-stone, had a warehouse added in 1899, and was extended to house a grain dryer in the early 1900s.

The Harrison mill, like many other small mills of its time, exported flour to Britain, but also relied upon gristing. The uncertainty of the business meant that other sources of income were generally necessary for the Harrison families. At Wakopa they had, for a time, operated a boarding house, a livery barn, a general store (in a partnership with a Clarence Williams from 1881-1884) as well as a sawmill, and in Holmfield they operated a milling machinery franchise of the Stratford [Ontario] Milling and Machinery Co., a machine shop (until 1956), and a lumber yard (1943-72). William also had a job as government inspector of steam engines for part of southern Manitoba for a time. Further revenue was generated by selling the bran and shorts to farmers as stock feed.<sup>75</sup>

Exports, which doubled on a national scale during the First World War, helped the mill flourish. In 1918 George and William's partnership broke up, but William continued to operate the mill, producing "Turtle Mountain Maid" flour, and taking his two sons and his daughter as equal partners in 1920. William died in 1926, but his children continued the operation; the company name was changed from William Harrison to Harrison Milling and Grain Co. at this time.<sup>76</sup> The original elevator was replaced in the 1920s, and a car dealership was added, as was a fuel and fertilizer dealership, and "this kind of diversification kept the business alive" during a time when Manitoba



mills were disappearing quite rapidly from the landscape.<sup>77</sup> Most of the mill's transactions at this time were with local area people, and mill records indicate that the business operated only for 40-45 days in the mid-1920s. The 1930s were particularly hard economically, with profits remaining low and losses sometimes occurring, but gristing flourished as it has tended to during times of economic depression, and the mill operated for 192 days in 1930-31, 119 days in 1932-33, and 75 days in 1935-36.<sup>78</sup> Harrison Milling charged four bushels of wheat to grist one hundred pounds of flour, with any surplus being sold elsewhere. Some farmers, travelling a great distance with their wheat, stayed overnight at the local hotel, perhaps again indicating the relative dearth of mills in the province by this time. A Cummings 75 horse-power diesel engine was installed in 1938, replacing the original steam engine.

From 1939 to 1948, the mill went into high gear as part of the war effort. It operated for 24 hours per day, seven days a week, making low-grade flour for the government, and although profits were apparently not great, they were much higher than in the previous decade.<sup>79</sup> Gross income peaked in the late 1940s (when Canada's wheat-flour export earnings were also at the highest point), at a figure that was sixteen times that of 1937-38. After this boom was over, however, the mill was closed for a year to allow the machinery to be rebuilt and to be converted back to producing the better quality flour demanded locally. Capacity was increased at this time from 700 to 1000 pounds per hour. In the late 1940s an electric motor replaced the diesel engine, and a second Holmfild elevator was purchased from Federal Grain, being moved a short distance and then connected to the Harrison elevator a decade later.

From 1950 to 1965, although occasional export contracts were filled (one for 4,000 one hundred pound bags in 1951 for instance), gristing increased proportionately once again. The mill operated up to eight months a year, in part because gristing allowed farmers to dispose of some of their wheat outside the Wheat Board quota system, and thus gain additional income. Gross income was lower, however (the figure for 1958-59 was barely above that for 1937-38), although some export contracts — such as one in 1963 when a contract from the Soviet Union for export to Cuba was filled — were gained.<sup>80</sup> Because of this contract the volume of output for 1963 was three times that of the years before and after. The company was incorporated in 1961, and the shares are now in the hands of Bill and Errick, grandsons of the founder.

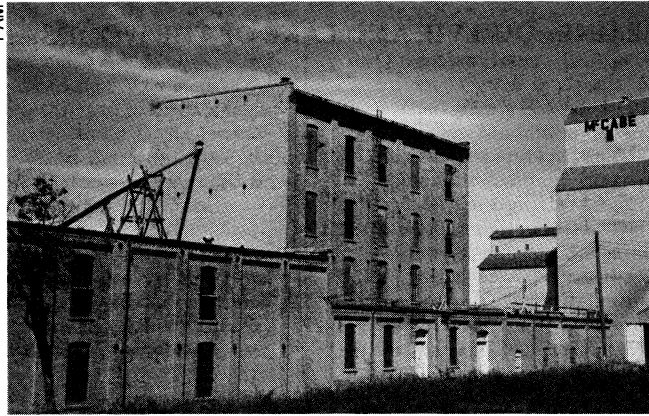
As the customer base has shrunk in recent years (due to declining rural populations), business (and revenue) has tapered off, and as times have become more prosperous and tastes have changed, homebaking has decreased and gristing has declined. Improved transportation has also allowed the people of Holmfild and district to shop farther afield. Gross income for the mill in 1964-65 was only a seventh of the peak attained in the late 1940s. One consequence of this decline in profitability is that both the Harrison brothers have obtained law degrees (in 1972),

and for a time operated a law office in Killarney. Such a change in options and desires -- and profits -- has led to the closure or sale of many milling and elevator companies on the prairies over the years, but Bill Harrison still devotes much of his free time to the mill -- and is encouraging his children to do the same. The mill operated for forty days a year in the early 1970s. Today it operates about twenty-five days per year, although its retail store is generally open five days a week.<sup>81</sup>

Harrison Milling illustrates the history of the custom milling industry of the prairies very well. Once flourishing, if only as a result of the "pluriactivity" of the milling families, small scale flour milling has gradually declined as local markets have dried up and export markets have been lost. Today the survival of Harrison Milling depends upon the unusual interest and good will exhibited by its present owners. Its maintenance through another generation is uncertain.

It is clear from this example that flour mills have been quite typical of "commodities" enterprises, showing wide fluctuations in activity, and swings from boom to slump, although the recent decline has been more noticeable in western Canada than in the east.<sup>82</sup> As Vatter has suggested for the milling industry in the USA, "Flour Milling appears to provide a "classic" illustration for those who argue that mature capitalism involves the numerical demise of small enterprise."<sup>83</sup> In Canada, however, and perhaps not surprisingly given the history of the industry, the "numerical demise" of the small mill "involved" more than economic factors. A 1948 investigation of the flour milling industry under the auspices of the Combines Investigation Act concluded that an illegal combine of the major line elevator companies accelerated the process of decline through price manipulation and other practices.<sup>84</sup> When the smaller mills could export, they could survive, but they have rarely been able to compete in the domestic market. In addition, changes in government regulations have also had a negative effect on this sector of the industry. For instance, during one period of time in the 1970s gristing was prohibited, removing in some instances the difference between profit and loss.<sup>85</sup>

Apart from economic changes, the milling industry, and particularly the small local mills have also been hurt by social changes. Many of the smaller flour mills were family operations, and the grain and flour trades show many examples of companies that do not survive the passing of the founding generation. Undoubtedly many flour mills, begun in the early years of the century, closed when the original owners died or gave up production. The next generation was unwilling or unable to assume responsibility, and outside buyers could not be found. In addition, there has been a decline in flour consumption as peoples' opportunities and tastes have changed.<sup>86</sup> The decline of home baking and a related increase in the popularity of bakery bread (mostly produced by the extra-regional millers) as standards of living rose, have also had a major effect — particularly on gristing. The growth of



McCulloch and Herriot Mill, Souris, 1967.

major chain stores has also tended to promote the larger millers' brands over those from the small mills.<sup>87</sup> As the mills closed, the towns in which they were located suffered, although in light of the dramatic transformations that have occurred in the demography of Manitoba since the Second World War, it seems unlikely that the loss of the local mill was the critical factor in a settlement's decline. The drop in rural population, however, almost certainly precipitated the death of many small flour mills because their customer base disappeared. Some other industry developments hit Manitoba harder than other parts of the Prairies.

## CONCLUSION

Although Prairie flour milling began in Manitoba, it soon dispersed to other centres in other parts of the region. By 1921 when eleven of the twenty six major (over 800 bbls) Canadian mills, with 26% of the national capacity were in the Prairie Provinces, only three of these mills were in Manitoba. These mills had, however, 44% of the Prairie capacity, compared to 22% in Saskatchewan (three mills), and 34% (four mills) in Alberta. By 1940 the Prairie Provinces had 39% of national capacity. Of the Prairie total, Saskatchewan had 40%, Alberta 33%, and Manitoba only 27% (the Lake of the Woods mill in Portage la Prairie having closed). By 1945 the Prairie total had risen to 43% of the national percentage, and within the Prairies Saskatchewan had 38%, Alberta 37%, and Manitoba only 25%. Since the end of the Second World War, "milling capacity has slowly but steadily increased in eastern Canada while declining in western Canada. This trend reflects the ongoing closure of older western mills built earlier this century.... Approximately 70 percent of the nation's milling capacity is now located in Ontario and Quebec."<sup>88</sup> Today only two small licensed mills remain operating in Manitoba, B.P. Kent Flour Mills of Virden, Manitoba, and Soo Line Mills in Winnipeg, both descendants of the "smaller mills" of the past.

Kent Flour Mills is a regional Prairie producer (80% of its output),<sup>89</sup> having actively expanded its once local operations in the past few years. It began its present operation

as a family-owned mill in Virden in 1934. Soo Line Mills was founded in Weyburn in 1917 and was moved to Winnipeg in 1936. The mill was sold to George Western in 1970 and in 1991 it was purchased by Archer Daniels Midland (ADM), a multi-national grain company based in the United States. ADM also recently took over Ogilvie Milling from John Labatt Ltd., although Labatts have retained ownership of the old Point Douglas mill site. The historic extra-regional mills no longer have a major presence in this province.<sup>90</sup>

A few unlicensed mills still operate on the Prairies, as government regulations have once more been changed to allow this, and these still continue to serve their local provincial markets. The only Manitoba representative of this group is Harrison Milling.

The cultivation of milling-grade wheat and the growth of the flour milling industry stimulated the development of Manitoba in the late nineteenth century and led to the development of a landscape dominated by "King Wheat" by 1930. The major milling companies controlled the production of flour,<sup>91</sup> and were geared to both national consumption and to export, but also dominated the grain elevator industry for two decades, and were critical major partners in that trade until at least the 1920s. But small custom milling companies themselves played a critical role in the development of the milling industry, as they were predominantly geared to supply their local regional markets. When necessary, however, this surplus capacity could be tapped for the export trade. In this way the small millers could be viewed as serving as a safety valve on the industry, counter-balancing as they did the oligopolistic tendencies among the larger millers. They also served a critical service function to the Manitoba farmers that enabled these people to turn their own grain cheaply into flour whenever necessary. Changing times have essentially erased this category of flour producers, and eliminated much Prairie milling. In sum the custom milling industry was an important tool for regional development. However, it is unlikely to be an engine of regional change in the future.

**TABLE ONE: OGILVIE AND LAKE OF THE WOODS: 1884-1902.<sup>1</sup>**

<u>Date</u>	<u>Ogilvie</u>			<u>L of W</u>		
	# of Structures	% of Prairie Total	% of Prairie Capacity	# of Structures	% of Prairie Total	% of Prairie Capacity
1884	20	29	38	0	0	0
1892	35	12	16	19	7	9
1902	59	10	12	50	8	10

Sources: 1884, Egan to Van Horne, December 31, 1884. CP Archives #8069; 1892, Fourth Annual Report of the Winnipeg Grain and Produce Exchange. (Winnipeg: WGPE); 1902 The Commercial.

Notes.

1. Totals include both elevators and flat warehouses. See text for full company names.

**TABLE TWO: ELEVATOR OWNERSHIP BY SELECTED COMPANIES: 1884-1911<sup>1</sup>**

<u>Company</u>	<u>Date</u>				
	<u>1884</u>	<u>1892</u>	<u>1900</u>	<u>1911</u>	<u>1924</u>
Ogilvie	12	31	45	118	166
LofW	0	17	48	88	119
Maple Leaf	0	0	0	46	61
WCFM	0	0	0	79	90
Northern	0	0	92	102	100
Farmer-owned	2	6	26	22	0
Next largest company <sup>2</sup>	4	11	64	110	433

Sources: 1884, Egan to Van Horne, December 31, 1884, CP Archives #8069; 1892 and 1900, Second, and Tenth Annual Reports of the Winnipeg Grain and Produce Exchange (Winnipeg: WGPE); 1911-12 List of Licensed Elevators in the Manitoba Grain Inspection Division (Ottawa: Department of Trade and Commerce); 1924-25 List of Licensed Elevators and Warehouses in the Western Grain Inspection Division (Ottawa: Department of Trade and Commerce).

Notes.

1. Excluding "Flat Warehouses". See text for full company names.

2. McBean Bros. in 1884; Martin, Mitchell and Co. in 1892; Dominion Elevator Co. in 1900; Canadian Elevator Co. in 1911; and the Saskatchewan Co-operative Elevator Co. in 1924.

## NOTES

We would like to thank Bill Harrison and other Prairie millers and former millers who shared their time and records with us. The cooperation of the staffs of the Public Archives of Canada, the Provincial Archives of Manitoba, and the Manitoba Legislative Archives is also acknowledged. Lastly, thanks to the Brandon University Research Committee, the Canadian Plains Research Centre, the Historical Atlas of Canada Project, and the Manitoba Heritage Federation for research funds which aided in the data collection process for this project.

1. "Custom Mills" differed from merchant mills in that they gristed for farmers on an individual basis. The smallest of these were termed "Micro Mills," or "Midget Mills." The latter were one-unit mills that made just one grind of the flour, thus producing a lower quality product. The only known midget mill now in operation is in Viscount, Saskatchewan.
2. Although most of the custom mills referred to in this paper were one "station" operations, other such as Geo. McCulloch and Sons, Harrison Brothers, and Dow Cereal Milling, each owned a few country elevators to gather grain of milling quality.
3. F.L. Dickinson, *Prairie Wheat: Three Centuries of Wheat Varieties in Western Canada* (Winnipeg: Canada Grains Council, n.d.), p. 1; C.W. Anderson "Grain: Pioneer Merchants established Winnipeg as a major Canadian Commercial Centre". *The Beaver*, Vol. 66, no. 5 (October-November 1986), pp. 33-42.
4. H.S. Patton, *Grain Growers' Cooperation in Western Canada* (Cambridge: Harvard University Press, 1928), p. 5.
5. *Flour from Canada's Far North West* (Winnipeg: Winnipeg Free Press 1907), n.p.n.
6. These innovations were originally introduced by Ogilvie Milling. Not to be outdone, the Hudson's Bay mill, and McMillan's City Mills also quickly converted to the new, superior, means of production.
7. V.G. Pickett and R.S. Vaile, *The Decline of Northwestern Flour Milling, Studies in Economics and Business No. 5* (Minneapolis: University of Minnesota Press, 1933), p. 24.
8. W.L. Morton, *Manitoba: A History* (Toronto: University of Toronto Press, 1957), p. 183.
9. A. Begg and W.R. Nursey, *Ten Years in Winnipeg. A narration of the principal events in the History of the City of Winnipeg from the Year A.D. 1870 to the year A.D. 1879 inclusive* (Winnipeg: Times Printing and Publishing House, 1879), p. 186.
10. W.T. Thompson and E.E. Boyer, *The City of Winnipeg, The Capital of Manitoba, and the Commercial, Railway, and Financial Metropolis of the Northwest: Past and Present Development and Future Prospects* (Winnipeg: The Commercial Press, 1886), p. 20; Begg and Nursey, *Ten Years in Winnipeg*, p. 178.
11. Thompson and Boyer, *The City of Winnipeg*, p. 50.
12. G.R. Stevens, *Ogilvie in Canada: Pioneer Millers 1801-1951* (Montreal: Ogilvie Flour Mills, 1951), p. 30.
13. Thompson and Boyer, *The City of Winnipeg*, p. 93.
14. Morton, *Manitoba*, chapter 8; D.R.M. Jackson, "The National Fallacy and the Wheat Economy: Nineteenth Century Origins of the Western Canadian Grain Trade" (M.A. Thesis, University of Manitoba, 1982), Chapter 5.
15. John Everitt, "The Borderlands and the Early Canadian Grain Trade" in R. Lecker (ed.) *The Borderlands Anthology* (Toronto: ECW Press, 1991), pp. 146-172.
16. *The Commercial*, Vol. 1, #8 (1882), p. 147.
17. *Manitoba Free Press*, Jan. 8, 1910.
18. H. Steen, *Flour Milling in America* (Minneapolis: T.S. Denison and Company Inc., 1963), p. 65.
19. W.C. Clark, "The Country Elevator in the Canadian West," in *Bulletin of the Department of History and Political and Economic Science* (Kingston: Queens University 1916), pp. 1-23.
20. Jackson, "The National Fallacy," 1982: chapter 5.
21. "Canadian Industries: 1 The Milling Industry," *Dominion Illustrated* Vol. 3, no. 53 (6 July 1889), p. 6.
22. Report of the Elevator Commission of the Province of Saskatchewan, 1910, pp. 20-21.
23. R.E. Ankli and R.M. Litt, "The Growth of Prairie Agriculture: Economic Considerations," in D.H. Akenson (ed.) *Canadian Papers in Rural History* (Ganonoque: Langdale Press, 1978) pp. 35-64; H.M. Larson, *The Wheat Market and the Farmer in Minnesota. Studies in History, Economics and Public Law*, Faculty of Science, Columbia University, No. 269 (New York: Columbia University Press, 1926); W.T. Easterbrook and H.G.J. Aitken, *Canadian Economic History* (Toronto: Macmillan, 1956).
24. R. Bellan, *Winnipeg's First Century: An Economic History* (Winnipeg: Queenston House, 1978), p. 54.
25. Stevens, *Ogilvie in Canada*, p. 30; J.L. Work, *Cargill Beginnings...an Account of Early Years* (Minneapolis: Cargill, 1965), p. 107; J.C. Everitt, "A 'Tragic Muddle' and a 'Cooperative Success': An account of two elevator experiments in Manitoba, 1906-1928," *Manitoba History*, Number 18 (Autumn 1989), pp. 12-24.
26. In 1909 the Ogilvies' largest ("Royal") mill in Montreal produced 6,000 barrels per day. The Fort William (Ontario) and Glenora (Montreal) mills produced 3,000 barrels each per day.
27. B.J. McKenna, Report on the Operations of Flour-Milling Companies in Canada (Ottawa: Department of Labour, 1918), p. 36. The capacity of Ogilvie's Winnipeg operation was only 3,000 barrels by the end of the war, and 2600 bbls by 1945.
28. W.A. Simonton, "The Flour Milling Industry 1926-35" (B.Com Thesis, Queen's University, 1937), p. 20.
29. Attempts are currently being made to turn the 111 year old mill into a grain-theme museum as a symbol of Winnipeg's significant position within the Canadian grain trade.
30. *The Commercial*, March 23, 1896, p. 618.
31. Totals in this the WGPE data set do not agree in detail with the Canadian Census reports for these times, perhaps reflecting the fact that some very small mills might have been excluded from the WGPE survey, especially if they were not on railroad lines. Overall, however, this data source does include the greatest detail.
32. Everitt, "The Borderlands."
33. Everitt, "Tragic Muddle."
34. These companies were the Ogilvie Milling Co., the Lake of the Woods Milling Co., the Northern Elevator Co., The Winnipeg Elevator Co., the Dominion Elevator Co., and Baker and Reid (the Western Elevator Co. by 1902).
35. *The Commercial*, January 15, 1910, p. 26; Clark, "The Country Elevator," p. 13; *Manitoba Free Press*, January 26, 1911, p. 8.
36. The Wheat Board was formed in 1935, to create a floor price for wheat, after the hectic days of the early 1930s. Originally the farmer could also sell through regular channels, but in 1943 the Board took over entirely.
37. Ogilvie's line of elevators was apparently more than was needed in order to keep the mills running. Even in 1952, before the purchase of the Lake of the Woods Company, The Jolly Miller reported that all "the wheat handled at [its] 120 elevators cannot be milled in the four Ogilvie Mills" Vol. 16, no. 5 (August 1952), p. 9.
38. This number included both the original Ogilvie "line" as well as the LofW "line" that Ogilvie had bought in 1954. Thirty five (15.6%) were in Alberta, 103 (46%) in Saskatchewan, and 86 (38%) in Manitoba. The Saskatchewan Pool took over the Fort William terminal elevator.
39. This was two years after the CPR completed its railway line to Eastern Canada, and five years after the CPR line from Fort William had reached as far west as Regina. The mill burned in 1967.
40. A.E. Epp, "The Lake of the Woods Milling Company: An Early Western Industry," in H.C. Klassen (ed.) *The Canadian West. Social Change and Economic Development* (Calgary: Comprint Publishing Company, 1977), pp. 147-213.
41. This mill had been constructed as a roller mill in 1882, when it was the largest on the Prairies outside of Winnipeg. It was closed by 1945.
42. Jackson, "The National Fallacy," p. 114.
43. Epp, "The Lake of the Woods Milling Company," pp. 160-61.
44. Maple Leaf Mills, *The Company that grew with Canada* (Maple Leaf, n.d.), p. 4.
45. In 1917 Maple Leaf's Port Colborne (Ontario) mill was enlarged to a capacity of 13,000 bbls per day to become the largest in the British Empire.
46. Maple Leaf was the third largest milling company, in terms of production, by 1918. It later grew to be the largest.
47. Samuel McGaw, one of the founders of WCFM, had previously worked for both Ogilvie and LofW, as well as being involved with the Dominion Elevator Company. The Goderich Mill was the one to which the first consignment of wheat for flour had been shipped in 1877. Maple Leaf Mills, p. 4.
48. WCFM was the fourth largest milling company in actual production in 1917, and second largest in total sales.
49. D.W. Holdsworth and J.C. Everitt, "Bank Branches and Elevators: Expressions of big Corporations in Small Prairie Towns," *Prairie Forum*, Volume 13, no. 2 (Fall 1988), p. 175.

50. It was the fourth largest national milling company in 1918, but had more Prairie capacity than Ogilvie (in 1921) and was second only to Robin Hood in Prairie capacity in 1945.
51. E.S. Rollins, "Elevator Towns versus Milling Towns," *The Northwestern Miller*, Volume 52, number 19 (1901), front page and p. 943.
52. T. Farley, "Souris Mill," Dawson and Hind, Vol. 14, No. 1 (Winer 1987-88), pp. 10-11. The CPR did not complete the first rail line through Souris until 1890, with another line from Glenboro being finished in 1892.
53. The standard brands of the large milling companies, such as Royal Household (Ogilvie), Five Roses (Lake of the Woods), and Purity (Western Canada Flour mills) cost more than locally produced flours, although they were often of better quality, (G.E. Britnell, *The Wheat Economy* (Toronto: University of Toronto Press, 1939), p. 30.
54. *The Commercial*, April 17, 1883.
55. Bonuses were rarely offered to elevator owners, again demonstrating the relative perceived importance of these related industries. Morris did give an exemption from taxation to the Ogilvie company (The Commercial, 21 August 1883), James Thompson received a bonus to erect an elevator at Emerson (The Commercial, 2 September 1884), and Portage la Prairie lent \$20,000 for the construction of a Farmers' Elevator in 1894 (The Commercial, January 28, 1894, and May 27, 1894), but these appear to be isolated instances.
56. A perusal of *The Commercial* between 1882 and 1890 shows that in 1883 bonuses were offered by, for instance, Chater and Selkirk; in 1885; Virden; in 1886 Killarney, Boissevain, Stonewall, and High Bluff; in 1887 MacGregor, St. Leon, and Millwood; in 1888 Treherne and Neepawa; in 1889 Cartwright, Winnipeg, Glenboro, Douglas (Elton R.M.), Arden, Birtle, Morden, Russell, Crystal City and Austin. Joint Stock companies were set up at, for instance, Rapid City (1883), High Bluff (1886), Birtle (1888), Pilot Mound and Russell (1889) – the latter group using the bonus offered by the town. Sidney offered a bonus as late as 1898, and this method of attracting construction continued in Manitoba to at least 1902.
57. One of these, High Bluff, offered H.J.F. Rose \$6,000 to erect a roller mill in December 1886, but after a protest by tax-payers the by-law authorizing the bonus may have been invalidated. (The Commercial, December 14, 1886, and May 15, 1887). Clearly the bonusing system was not popular with everybody.
58. Anderson, "Grain," p. 34, indicates twenty mills in 1880. The distribution he describes is used here in concert with the similar census figures for 1881.
59. F.H. Leacy (ed.), *Historical Statistics of Canada*, second edition (Ottawa: Statistics Canada, 1983), M 228; J. Seaborn, *About Canadian Wheat, Facts and Figures. With a Directory of Millers, Shippers and Buyers of Flour, Grain and Produce* (Toronto: Hunter Rose Co. Ltd., 1899), p. 18; Stevens, Ogilvie in Canada, pp. 32-33. The same changes occurred in the United States, causing Rollins to exclaim that "If it is not the business of the railroads to foster industries, is it their right to wreck them?" "Election Towns," p. 943. The number of "Flour and Grist Mills" (including feed mills) had risen from 2,407 in 1881 to 2,550 in 1891, but then dropped precipitously to 1,141 in 1911. As the Prairie numbers in this category had risen from 25 to 68 from 1881 to 1891, climbing to 82 by 1911, the direct effects of these changes were clearly more significant elsewhere in the country. Between 1891 and 1911 mill numbers in British Columbia dropped by 75%, in Ontario dropped by 47%, in Quebec by 63%, and in the Maritimes by 68%. Some closures did occur in Manitoba, however, and industry growth was almost certainly slowed (Census of Canada, 1881, 1891, 1911).
60. *The Commercial*, February 10, 1890. Some mills continued to use millstones at least into the 1920s, probably to grind feed.
61. *The Canada Year Book 1922-23* (Ottawa: King's Printer, 1924), p. 445.
62. *The Commercial*, March 23, 1896, p. 618.
63. Easterbrook and Aitken, *Canadian Economic History*, pp. 481-82.
64. H.G.L. Strange, *A Short History of Prairie Agriculture* (Winnipeg: Searle Grain Co., 1954), p. 60. In 1918 Alberta had 808 elevators and Manitoba 690. Saskatchewan then had 2,117.
65. The McCulloch mill in Souris, Manitoba closed in 1921 after being established in 1881. The reason given was "too much government interference, with regulations and reports," and certainly changing regulation patterns were affecting the industry. A more likely explanation is believed to have been a loss of quality of local grain due to rust. (See Farley, "Souris Mill," pp. 10-11). If so this might have led to the closure of other mills in the region.
66. McKenna, *Report on Operations*, p. 37.
67. Measured in terms of Value of Gross Production.
68. Britnell, *The Wheat Economy*, p. 30.
69. *Industry Profile: Flour Milling* (Ottawa: Industry, Science, and Technology Canada, 1988) p. 30.
70. The flour milling industry's industrial rank dropped steadily from 1940 to the 1960s, although it briefly revived, reaching as high as fifth position in 1946, as a result of wartime and immediate post-war demand.
71. Data from *By the Old Mill Stream: A History of the Village of Holmfeld and District* (Holmfeld: Holmfeld History Book Committee, 1982), pp. 15-18; L. Redman, "Mill of the Century," *Manitoba Moods* (Autumn 1976), pp. 46-47; I. Bell "Harrison mill still churning after 92 years," *Brandon Today*, Vol. 2, no. 47 (1990), p. 7; William Harrison, personal conversation.
72. George Harrison became a member of the Winnipeg Grain and Produce Exchange around 1902.
73. Matthew Harrison moved to Old Bottineau, and later Rolla, N.D. to operate flour mills.
74. Some ninety-five percent of the machinery in today's mill is original.
75. Bran and shorts provided a small but perhaps critical portion of the milling income, compared to flour production. Records are incomplete, but indicate that gross earnings from flour consistently made up between 71% and 76% of milling income from 1930 to 1970.
76. The name was changed from Harrison Brothers to William Harrison at an earlier date.
77. W. Harrison, personal communication.
78. The 1935-36 figure is made up of "16 8-hour days and 59 10 hour days."
79. *By the Old Mill Stream* reports that 50,000 100 pound bags were produced each year during the war.
80. Harrison flour has also been exported to North Africa and Italy, as well as England.
81. The mill can still produce 250 100-pound bags of flour during a 24-hour shift.
82. *Industry Profile*, p. 1.
83. H.G. Vatter, *Small Enterprise and Oligopoly. A Study of the Butter, Flour, Automobile, and Glass Container Industries*. Oregon State Monographs, Studies in Economics, No. 4 (Corvallis: Oregon State College, 1955), p. 65.
84. F.A. McGregor, *Flour Milling Industry. Investigation into an Alleged Combine in the Manufacture, Distribution, and Sale of Flour and Other Grain-Mill Products*. Report of the Commissioner, Combines Investigation Act (Ottawa: Department of Justice, 1948).
85. Gristing was outlawed by the Canadian government, but this ruling did not survive a court challenge from William Harrison and Gordon Hallett, then owner of Yorkton Milling.
86. H. Working, "The decline in per capita consumption of flour in the United States," *Wheat Studies*, Vol. 2, no. 8 (July 1926), pp. 265-92.
87. Pickett and Vaile, *Decline of Northwestern Flour Milling*, Introduction and Summary.
88. *Industry Profile*, p. 1.
89. About 5% goes to Eastern Canada, with the balance being exported, often on C.I.D.A. contract.
90. Three other significant flour milling companies, all American in origin (The Ellison Milling and Elevator Company, The Quaker Oats Co., and Robin Hood Mills Ltd.) have operated on the Prairies, but none of these had line elevators, or mills, in Manitoba.
91. V.C. Fowke, *The National Policy and the Wheat Economy* (Toronto: University of Toronto Press, 1957), p. 99, includes a table adapted from L.G. Reynolds, that shows that 73% of the cumulative percentage of milling output was controlled by five companies in the mid-1930s.