

## Liquid gold: tapping into the power dynamics of maple syrup supply chains

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From August 2011 until July 2012, the Global Strategic Maple Syrup Reserve in Québec was the site of a major food crime, as thieves siphoned off 9600 barrels (3,000 tonnes) of ‘liquid gold’ worth \$18 million (CAD) for counterfeit sale across provincial and state borders, in what became known as the Great Maple Syrup Heist (Hamilton 2016). Under cover of night, and thanks to securing access to some of the reserve’s key warehouses, the thieves replaced the syrup with water, volume-for-volume, which meant the switch was only discovered during an inspection many months later at one of the storage warehouses in Saint Louis de Blandford (Cohen 2016). In the end, three men were charged with hefty fines and prison sentences, most notably the ‘ring-leader’ Richard Vallières, who was sentenced to 8 years in prison and fined \$9.4 million (Toronto Star, 2018).

Aside from the obvious sheer opportunism at play, the heist exposed a simmering war in the industry and has been characterized by some as a rebellious response to the quota controls established by the Federation of Québec Maple Syrup Producers which has, since 1990, agreed with its members to hand over any surplus to ensure stability of supply and pricing. Some argue these quotas have spawned a black market leading to prohibition-style smuggling across borders, whereas the Federation defends its ‘collective marketing’ system (FPAQ 2018; Hamilton 2016; Skerritt 2016). This example highlights some of the tensions found within agri-food supply chains and systems, particularly those espousing norms, values and behaviours linked to the ‘moral economy of food’ (including, for example: an emphasis on food producers’ rights to secure livelihoods and fair pricing, and consumers’ demands for traceability and knowing where their food comes from) all of which are influenced by networks of power (Morgan 2007, p. 167). The heist exposes the uneasy co-existence of collective marketing, the quest for pure and natural products, the realities of global marketplaces and consumer demands amidst the neo-liberal desires among (some) producers for higher profits. Although the iconography and imagery of the story of maple syrup production still heavily draws upon a nostalgic era of the small farm producer, these events suggest a powerful lobby which, in the wake of the heist, was branded by some rogue producers as a maple syrup ‘cartel’ or ‘mafia’ (Skerritt 2016).

How did things come this?

This heist and the illicit rogues involved with the theft, thrust Canada's maple syrup industry into a limelight of sorts, or at least earned it a place among the humorous backpages featuring quirky offbeat stories, and even inspired a (yet to be produced) film starring Jason Segel (Hertz 2013). Entertainment factor aside, however, a closer analysis of the origin and trajectory of the maple syrup industry – which was at first a maple sugar industry – reveals how its producers' collective and cooperative approach is deeply rooted in efforts to stave off threats from adulteration and US competitors, establish federal purity legislation and create an appetite for maple products in domestic markets. Historical data and analysis reveal a long tradition of collective and cooperative power among North American maple producers, including national and provincial groups within Canada many of whom committed to norms and values that aimed to protect both producer and consumer. These associations that were formed in the early twentieth century adopted the practice of collective marketing and espoused values and norms that aimed to improve producers' outputs, profits and increase their leverage with the federal government. In this paper I trace the historical evolution of Canadian (primarily Québec) maple syrup production and marketing focusing on the early twentieth century cooperative organizations that preceded the Federation. I consider where power and agency sits - and has shifted - within this supply chain, taking into consideration the implications for both producers and consumers.

### **Cooperatives at the turn of the century**

Just over 100 years before the heist, the Canadian and Québec maple syrup industry was having a crisis of a different sort. The industry was originally focused primarily on maple sugar – the grainy powdery desiccated result of boiling off all of the maple sap, rather than leaving some moisture in the product resulting in a syrup. Although maple sap, sugar and syrup were known products and processes for centuries before, the maple sugar industry coalesced into a viable entity and business for farmers in the middle of the 19<sup>th</sup> Century. New export markets had opened up overseas in Britain and France, and south of the border in the US demand continued at a steady level. Maple sugar's solid cake-like block form, sometimes referred to as 'maple concrete', made for easy transport and shipping in (for eating) the form of 'dainty two-ounce cakes, neatly packed' or (for cooking) in 'one and two-pound bricks and in pails or tins of ten pounds' (Perkins 1910). It increasingly found its way into Europe as more agents and importers cropped up in port cities like Liverpool, and also made for a nostalgic treat for Canadian soldiers posted abroad during WWI (Lefebvre 1916). Maple syrup was lesser known, and also seen as a luxury item to send to well-to-do friends in one or

five gallon cans (Lynch 1910). Requests came from importers and agents in England to the Canadian Deputy Minister of Agriculture about the potential of developing a demand for it among English consumers (Watson 1898).

Maple syrup and sugar, both boiled down from the sap or 'maple water' that flows from the trees, can vary in supply each year depending upon the season and temperature of the spring thaw. This made for unpredictable yields depending on the season and climate which also affected production levels. During the spring harvest, trees are 'tapped' by boring a spout into the bark; the sap flows out and is collected in pails attached below. The pressure from the changing temperatures of the spring thaw, with cool nights and warm sunny days, causes sap to flow out of the tree, and drip steadily into the buckets. Buckets would be collected by farmers and poured into large barrels, and transported by sled or horse-drawn sleigh to the sugar shack or sugar camp for processing. Once in the sugar shack, sap was poured into large 'modern' evaporators and boiled off at the right temperature to create syrup, or, sugar, and approximately 40 L of sap was needed to make one litre of maple syrup (Spencer 1913 pp.14-44).

Between 1851-1890, yearly production of maple sugar in Canada was steadily increasing (from 13.5 million lbs to 22.5 million lbs) but average yields began to decrease around the turn of the century and eventually dipped to less than 20 million lbs. As today, the bulk of production came from Québec (14.3 million lbs at the turn of the century), with lesser contributions from the neighbouring provinces of Ontario (5 million lbs), New Brunswick and Nova Scotia (approximately 0.5 million lbs combined) (Spencer 1913, p.12).

This dip in production caused alarm among maple sugar producers. Like in many industries at the time, adulteration was rampant in maple sugar and syrup products. It was easy to mix maple sugar with products like beet and cane sugar, which undermined the profits of those who kept it pure, and in some instances it caused many farmers to give up entirely as it was often more profitable to chop down trees and sell the maple wood instead (Lefebvre 1916). Although some maple sugar aficionados believed consumer demand 'should be higher' (Grimm 1911) it was becoming increasingly difficult to compete with much cheaper cane sugar which had become more readily available and affordable globally as a regular household and dietary source of sweetness (Mintz 1986, p. 143).

Near the turn of the century, consumers still saw maple sugar and syrup as a special luxury item, or many would not have even heard of the product; it was not an everyday staple item for the average household. Pure maple sugar and syrup producers were undercut and undermined by fake cheaper adulterated blends, often marked by some design 'suggestive of

the Canadian emblem' which would leave a bad taste in the mouths of consumers trying it for the first time (Spencer 1913, p. 45). Those farmers who did have success on a small scale, would do so by producing a very high quality product, building up a reputation through word-of-mouth and earning their profit through direct sale to consumers. Such farmers who had a good reputation would see prices in the range of \$1.25 to \$2.00 per gallon of syrup, and 12.5 to 30 cents per pound of maple sugar (Spencer 1913, p.46).

The global sugar market had thus become quite competitive, and this crisis of production prompted Québec producers to look south for inspiration and to consider the benefits of collective power. 'In Union is Strength' were the opening words of A.A. Carleton, the head of the Vermont Maple Sugar Makers' Association, in his 1913 address to an audience of Canadian producers contemplating their existence given the threats to the industry (Spencer 1913, p. 46). The Vermont group had existed for about 20 years prior, and was established for similar reasons, namely, that the industry was in decline due to the work of 'mixers' creating compound goods of lesser quality (Spencer 1913, p.54).

The Pure Maple Sugar and Syrup Co-Operative Agricultural Association was established in January 1913 based in Waterloo, Québec, but open to producers in Ontario, New Brunswick and Nova Scotia as well. The Association had two patrons, and, as an indication of how much support existed at both the federal and provincial levels: Honourable Martin Burrell (Canadian Minister of Agriculture) and the Honourable J. E. Caron, Minister of Agriculture for the Province of Québec. The honorary president post was held by Professor John F. Snell, a chemist from MacDonald College in Québec who had been conducting research on methods of analysis for samples of maple syrup (Snell 1920). The President was M.F. Goddard based in Waterloo; Vice-President was Chas. F. Fisk of Abbotsford, and the Directors included John H. Grimm of Montreal, R.T. Brownlee of Hemmingford, J.A. Dupuis of DesAulnais. The Secretary-Treasurer role was held by Joseph Lefebvre (Spencer 1913, p 52).

For the annual fee of \$1.00, producers could obtain a membership. The Association established clear objectives which would attempt to place maple products on both the political, legislative and social agendas in Canada. First and foremost, they aimed to put pressure on the governments of Québec and Canada to change the existing laws to stop adulteration and the sale of compound syrups using cheaper and lower quality items which were falsely branded as 'maple'. Canada's first piece of anti-adulteration legislation emerged in 1874 ('An Act to Impose License duties on Compounds of Spirits; to amend the Act respecting the Inland Revenue; and to prevent the adulteration of Food, Drink and Drugs')

and was modelled on English laws (Heick 1991, p. 11; Ostry 2006, p 13). Although it had scope to make adulteration illegal for an array of products, it did not go far enough to define clear standards, grades or specifications for maple products. The association also wanted the government to assist in educating the so-called ‘agricultural classes’ in how to improve output and quality, and provide educational lectures, exhibitions and experimental stations to teach young people and consumers about maple sugar and syrup (Spencer 1913, p. 52). Finally, they wanted the provincial and federal governments to help the members get markets both at home and abroad for their products (Spencer 1913, p. 52).

The Association strongly advocated the idea of ‘Cooperative marketing’ (See Figure 1). In its first year, approximately 5,000 gallons of syrup and ‘a considerable amount of sugar’ was handled by the association, and ‘satisfactory prices’ were obtained (Spencer 1913, p. 47). The aim was to do away with competition which drove prices down and put producers at a disadvantage. At that time in Canada, it was estimated that there were approximately 55,000 sugar factories capable of making maple sugar or syrup but the association was concerned that it wasn’t meeting its potential, and there was money to be made (Lefebvre 1916, p. 20). It wished to ‘do the same for the [maple] sugar industry as for dairy and cattle breeding.’ (Lefebvre 1916.) In an impassioned speech at their 1916 meeting the Member of Parliament for Vaudreuil, Gustave Boyer, reminded the assembly that ‘the essential condition for reaching the desired success quickly is the community: cooperation of goodwill and ideas’ (Lefebvre 1916). The advantages to the working or ‘agricultural classes’ were emphasised: ‘In any section of the industrial world, when the success of the working classes was desired, the first thing was to unite in a body, and the latter then, championing all, would begin the struggle.’ (Lefebvre 1916).

Part of the struggle with maple products, then, was to improve output and stamp out adulteration. One strategy to meet these threats was to improve the quality of maple sugar and maple syrup by introducing grades and standards, and modernising equipment, as a way to protect both producer and consumer from the ‘speculator and middle man’ because as many advocates for pure maple sugar knew, pounds would magically get added to the product as it flowed into cities (Spencer 1913, p. 56).

### **Adulteration and purity**

The declining productivity of the maple syrup industry was very much linked to the ‘devilish’ and ‘evil’ problem of adulteration and concerns over product quality (Grimm 1911).

Although the nineteenth century heyday of adulteration was quelled somewhat by pure food

laws in both the US (1906) and Canada (1874), it was still in fashion well into the twentieth century. Products which were not necessarily injurious to health, but still misleading, such as adding yellow to margarine to mask as butter (and thereby offering a cheaper alternative) paralleled some of the debates and concerns found among producers in the maple industry (Dupré 1999; Heick 1991). At the end of the nineteenth century, glucose could be had at less than two cents a pound, granulated sugar at four cents a pound, while syrup sold direct from producers at about one dollar per gallon. It was hard to argue against the cheaper alternative offered to consumers through compound or flavoured products, and with competing sweet options on the market such as glucose, molasses and cane sugar, one way to position maple sugar and syrup was that as a 'luxury item' for 'discriminating customers' (Spencer 1913, p 45). But as the Canadian Deputy Minister of Agriculture warned British enquirers about the state of Canadian maple products, it was 'difficult for most of the manufacturers to withstand the temptation [to adulterate].' (Parmelee 1898).

Maple sugar could be easily mixed with cheaper cane or beet sugar, or other powdery substances, such as chalk or *Blanc d'Espagne*, a calcium carbonate and clay powder mixture (Lefebvre, 1916). Maple syrup could be mixed with darker grades or water, or in some cases molasses (Grimm 1911). Some mixers created a compound using an alternative substance called 'mapeleine' (maple flavour) that, when one ounce was mixed with a gallon of molasses, produced a so-called 'delicious syrup' (Grimm 1911, p. 4). A series of investigations conducted by the Department of Inland Revenue's Chief Dominion Analyst Thomas MacFarlane in 1906 and again in 1908 at the point of retail sale showed that the samples taken by inspectors found adulteration to be rampant. In 1906, of 85 maple syrups sampled from the four main provinces (but selling products originating and processed by manufacturers in both the US and Canada), only 22 were 'genuine', 2 'doubtful', 8 had 'declared adulteration' on the label, and 53 were found to be adulterated; of the 26 maple sugars, only 11 were found to be 'genuine' (MacFarlane 1906).

Inspection of samples was governed under the remit of the Adulteration Act. The cooperative, however, felt it didn't go far enough to protect maple products, and the 3200-strong membership petitioned the Minister of Agriculture to provide greater regulatory protection which would require analysts to confirm the sugar content of so-called 'maple products' (Grimm 1911, p. 20). The minister argued that it was too difficult to test but Grimm, one of the Coop's directors, argued that at the manufacturing plants it was possible. Producers were selling their product increasingly less and less direct to consumers and instead going through powerful wholesalers, factories and retailers such as George Cary in

Vermont, the Imperial Syrup Co. in Montreal, or The New England Maple Sugar Co. in Boston, or, the Québec Maple Sugar Producers' Society established its first plant and warehouse in Plessisville (MacFarlane 1906). The advent of large bulk transport barrels made this possible; these could be loaded up at the farms' sugar shacks and shipped by freight train to cities like Montreal or similar cities south of the border where wholesalers and retailers congregated. Although the barrels helped facilitate and create new market opportunities for producers, they also caused problems as these were uninspected and ungraded at both the point of collection and at the wholesalers, leaving much room for mislabelling or mixing of its contents. Producers and farmers committed to selling a pure product were being undermined; power had thus come to rest in the hands of the manufacturers and wholesalers, the 'mixers' as some cynically referred to these actors further along the maple product supply chains (Spencer 1913, p. 46).

The cooperatives fought back against this development. Drawing on its collective marketing and bargaining power, it sought to improve the overall quality, provide education and create standards. The Québec producers created its own set of grades for sugar: 'Choice', No. 1, No. 2 and No. 3, each in increasing darkness and robust flavour. No. 2 and 3 would be used for making sugar for baking, or sent to the tobacco industry for mixing with cigarettes (Québec Maple Sugar Producers 1920, p. 10).

A powerful figure that emerged during this time was John Grimm, who, as mentioned above, was one of the five first Directors of the Pure Maple Sugar and Syrup Co-operative Agricultural Association, and owner of Grimm Manufacturing in Montreal – a maker of industrial maple sugar and syrup processing equipment such as evaporators. In addition to passionately preaching against the existence of 'bogus maple syrups and sugars', improving quality and establishing grades, he was also a strong advocate for collective marketing of maple sugar and syrup (Grimm 1911). In 1913 Grimm organized a maple sugar and syrup contest in Montreal and strongly lobbied the federal government for the need for greater legislation. (Spencer 1913, p.57). The collective petitioned the federal government to establish an Act that would govern the maple syrup industry, and enshrine specifications and definitions of the word maple in the rule of law. Eventually, after consultation on a draft with people like Grimm, tobacco manufacturers (invested in the darker grade sugar for their products), the coops and retailers, the Maple Sugar Industry Act (and its regulations) came into force in 1931.

Strict specifications were to become enshrined in the Act. Overall, all grades of syrup had to weigh 13lbs 2 ounces per gallon and contain no more than 35 per cent water. 'Canada

Fancy' was very light amber or straw coloured with a characteristic maple flavour, free from any fermentation; 'Canada Light' was light amber and straw coloured; 'Canada medium' was to be slightly darker amber or straw and finally, 'Canada Dark' was darker in colour than medium and (unlike the other 3 grades) trace fermentation or 'sappiness' flavour was permitted (Department of Agriculture 1931, Section 12). Sugar grades were also similarly defined and graded in the Act: all must consist of entirely solid or pulverised product resulting from the evaporation of maple sap or syrup and contain no more than 10% water, each with a designation of either 'Canada Light', 'Canada Medium' and 'Canada Dark'. (Department of Agriculture 1931, Section 13 (1)).

Despite the Act in force as of 1931, the maple industry continued to be 'menaced!' as the Act wasn't being properly enforced, and adulterated products continued to flow through the supply chains. Again, this caused more crisis, as an anonymous bulletin featuring Grimm's visage prominently on the front page and seemingly aimed at consumers and producers screamed out headlines that '55,000 Canadian farmers [were] being robbed of a real asset' and it was the fault of the department of health for not inspecting and testing enough samples and enforcing the law (Maple Industry Is Menaced 1928). The anonymous author of this bulletin appeared to have great insider industry knowledge and connections to the point of even being able to have placed on one occasion a sample of adulterated maple sugar directly in the hands of the Minister of Health, a 'black, grimy, rank to the taste...dreadful apology for maple product.' (Maple Industry is Menaced 1928). At the time the industry was valued at eight million dollars per annum; adulteration meant money was being lost, farmers and consumers were continuing to be 'swindled' and cheated and the whole industry was 'undermined' by adulteration (Maple Industry is Menaced 1928).

The Cooperatives called upon producers to lobby the government and MPs and demand that the regulations be enforced and more inspectors get trained up and sent out; they appealed to a sense of national unity and pride and that taking action meant to 'be a builder-up, not a tearer-down of Canada.' (Maple Industry is Menaced 1928). Part of the problem was finding suitable inspectors. Many inspectors and analysts from the government Fruit Branch were enlisted, but few had the expertise in maple products to identify and test for real or fake products out in the field or the sugar groves. Tests had been developed thanks to a strong research program emanating from Montreal and McGill University into the science of maple products, but weren't in widespread use. Testing for adulteration by cane or other sugars was tricky because the same constituent components found in granulated sugar was identical to the pure sugar components of maple syrup (Snell 1913, p. 740). Testing for other



components unique to maple syrup such as malic acid as well as for alkaline values of ash (the remaining inorganic components once the organic parts have been burnt off), along with lead values, or the 'lead test' were some of the ways for an analyst to determine if a maple product had been adulterated (Snell 1913, p. 740). It was tricky, however, and few analysts had training in these techniques and methods of detection as tests were still being developed by agricultural chemists. Moreover, inspectors were only learning about the differences in the new established grades. Part of the problem was also the point of inspection. As Grimm argued, testing at the site of production was not enough: it was a much better idea to test at the site of the wholesalers and retailers where mixing would be more likely to occur (Grimm 1929). The Minister of Agriculture assured Vaillaincourt of the Québec coop that he was working on finding 'a capable research man' (Grisdale, 1928).

Once again the Cooperation launched a powerful lobby to the Canadian federal government, in conjunction with equivalent organizations in New Brunswick, Nova Scotia, Québec and Ontario, petitioning for stricter controls on maple syrup purity and stricter fines for adulteration, better capacity for inspection and enforcement. Requesting graders for syrups produced by 'dealers' (wholesalers) each spring in order to 'protect both the farmer and purchasers' (Vaillaincourt 1936). The federal government sent inspectors from their fruit branch to do surprise 'bush inspections', but many producers argued that more could be done at the packing, wholesaling and retail levels (Gardiner 1936). The cooperatives pushed for more: The New Brunswick Maple Sugar Producers Association passed a resolution requesting that the Act be revised to insist that 4 grades be mandatory on labels for inter-provincial trade; once Québec cooperatives got involved with the lobbying, the federal government responded with revisions to the Act (Clark 1936).

Meanwhile, as the Canadian industry headed toward stricter purity, grades and standards, south of the border Grimm's equally vociferous counterpart, if not a foil in this maple syrup drama, was the wholesaler George Cary, of Cary Maple Sugar Company in Vermont. At the time the largest 'dealer in the world' and 'preacher for purity' Cary wrote to the Canadian Minister of Agriculture suggesting that Canadian farmers were in the 'habit of cheating' and insisted that there wasn't a demand for the lighter grades among consumers (Cary 1928). He also criticized the 'attitude' of the Cooperative in Québec and Plessisville for 'hurting' the industry. The Cooperative had begun to also subsidize producers, which Cary said forced him to buy up cheap Canadian products (and re-sell these) just to remain competitive. Cary said that Canadian pure products were far 'too cheap' and even lobbied the

House of Representatives in the US to raise the tariff on Canadian maple sugar to ten cents per pound, and on syrup to six cents per pound (Montreal Daily Star 1929).

The ‘preacher of purity’ was, somewhat ironically, caught up in litigation with Maine producers, and evidence showed he in fact supplied them with cane sugar so that they could adulterate their maple products (Payne 1928). In the wake of this threat from an American increase on maple duties, Grimm felt this was an opportunity for Canadian farmers to ‘clean up a little bit’ and make a quality of sugar ‘better than the class of sugar that Cary likes to ship to the US.’ (Grimm 1929). Grimm wrote to the federal minister of agriculture suggesting the need to ‘help ourselves and help the farmer’ and ‘obtain a market for maple syrup and sugar at home.’ (Grimm 1929). Because of the problems outlined by Grimm, namely the lack of enforcement of the new maple industry regulations, the looming US tariff rise and inevitable drop in exports, the Minister of Agriculture and Deputy Minister agreed that something had to be done to avert another maple industry crisis; Martin urged that it was time that ‘we must foster the sale of the pure product among our own people’ (Martin 1929). As one producer put it, ‘it has been suggested that we advertise in England, why not work our own country first?’ (Jenne 1928).

### **Marketing of maple products**

By the mid-1930s, with the legislative clout of the new maple sugar act, the Québec producers lobbied the Canadian federal department of Agriculture as well as the department of trade to help with the marketing of products both at home and abroad. The harvest in 1934 and 1935 was particularly heavy and producers were ‘flooded’ in syrup (Pryce 1935). Having taken the stand for purity against their American counterparts, Canadian producers with the support of the federal government, embarked upon an ambitious advertising campaign to promote maple syrup and sugar products to domestic audiences. There were still calls for finding markets in the US and well as overseas in the United Kingdom, however the more expensive cost of Canadian sugar put British consumers off (Skinner 1935).

The marketing of maple syrup began in earnest in the 1920s, led predominantly by the large collective of Québec Maple Sugar Producers’ Society, but with support from their provincial and national counterparts. The messaging involved telling the story of the production process, the maple groves, the flowing of the sap and the general romance of the sugar bush and maple harvesting season, especially the ‘sugaring off’ parties where the ‘amorous instincts of the budding youths’ might be awakened (Spencer 1913, p. 12; Vaillancourt 1927, pp. 3-7). A nutrition and health angle was used to market maple products

as being 'pure' sugar as opposed to the cheaper 'refined' cane sugar or molasses. Maple sugar and syrup was presented as being more calorific and hence of higher value with a total of 75 calories in one tablespoon, as opposed to 63 calories in cane sugar or molasses, or 57.5 cal in corn syrup (Maple Sugar Producers of Québec 1920, p. 13). It was also marketed as a good source of iron which would be of benefit to 'anaemic persons' (Maple Sugar Producers of Québec 1920, p. 14).

In 1934 the federal government agreed to spend \$5000 toward a marketing campaign which would result in a series of adverts in popular magazines and papers across the country, special displays at railway stations, and educational events aimed at schools, such as maple syrup 'essay writing contests' (Adams 1934; and see Figure 2). As part of this campaign, the healthfulness of maple syrup was invoked as a reason to make it a part of a child's 'daily diet' as the 'safe sweet for children' which was also good for them (See Figure 3). Moreover, maple products were to be trusted as they were pure and protected by the Dominion Government, with quality guaranteed from 'the tapped tree to your table' (See Figure 3). The cooperatives also enlisted the help of housewives and womens' institutes to contribute ideas on how to use maple products in the home. Maple recipes were distributed in short pamphlets containing photos and instructions on how to construct an array of maple-based delights such as maple blanc-mange, maple candied rice, maple peanut brittle, and prunes in maple syrup (Maple Sugar Producers of Québec 1920). Consumer feedback and tastes, however, started to show a preference toward syrup moreso than the hard and awkward sugar blocks, whom some felt resembled 'common laundry soap' and couldn't compete with chocolate bars retailing at 75 cents to a dollar in the shops (Adams 1934). Gradually the coarse, dark, unattractive blocks of maple 'cement' started to make way for the more luxurious, fine and pure maple syrup.

## **Conclusion**

The collective marketing of maple syrup by powerful cooperative groups continued throughout the rest of the twentieth century, and from the 1930s onward Canada began to eclipse the US in terms of worldwide production. By the 1960s, maple sugar as a product almost disappeared entirely and producers focused mainly on syrup, although some niche gourmet products have been developed or retained. The Federation of Québec Maple Syrup Producers was officially established in 1966, and in 1975 the International Maple Syrup Institute (ISMI) was created to represent cross-border interests of Canadian and American producers. Québec produces approximately 80% of the world supply, and, to consolidate its

strength, the Federation has continued to expand its global collective marketing campaign, which resulted in the creation of a maple flavour wheel in 2004, and in 2017 the construction at a national level of a revised and rebranded new set of '4 Grades' based on translucence and each with associated flavour profiles, all designed to invoke a unique Québec maple *terroir* (Moriniaux 2007). A high level of consumer protection has been established, although the benefits of maple syrup may be more culinary than healthy. But what about the protection for farmers, the 'agricultural classes' and the norms and values established and embedded within these powerful networks at the start of the twentieth century? Although a smaller heist occurred in 2016, the FPAQ has recently confirmed that the quota system is being revisited to improve benefits for producers, and it is looking to expand production by adding five million taps after a record season in 2017 (FPAQ, 2018).

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**List of figures and captions [will be sent via We Transfer to Máirtín]**

Figure 1. Label authorised by the Maple Sugar and Syrup Cooperative Agricultural Association. (Source: Spencer, J.B. (1913). The Maple Sugar Industry in Canada. Bulletin No. 2B Ottawa: Government Printing Bureau. Library and Archives Canada. Ottawa.)

Figure 2. Windsor Station Room 351 Maple Syrup Marketing c. 1935. (Source: Library and Archives Canada, Department of Agriculture. RG 20 Vol. 311. Ottawa.)

Figure 3. ‘The Safe Sweet for Children!’ c. 1935. (Source: Library and Archives Canada. Department of Agriculture, RG 20 Vol. 311. Ottawa.)