MY COUNTRY IS FIRE: QUÉBEC, CANADA, FORESTS, AND FIRE

Stephen J. Pyne Arizona State University

Québec – the fabled country of winter; of cold, ice, rock, and water – is also a country of summer; of drought, winds, woods, and fire. The boreal forest burns with stand-replacing fury roughly every 60-100 years. The Great Lakes-St. Lawrence forest burns with a mixed cadence, undergoing more frequent surface fires along with the occasional crown fire. Until recently, an inhabitant anywhere in Québec could, within the span of an average lifetime, expect to experience at least one significant

fire. Since the Laurentide ice sheet left, Québec has likely burned a hundred times. Fire, both mild and cataclysmic, is as fundamental to the dynamic of its natural history as snow and ice.

Yet unlike ice, a substance, fire is a reaction. It has no reality apart from what its setting allows. It synthesizes its surroundings. It is what its context makes of it. How, then, might we understand the context of fire in Québec? What does fire mean to Québec? What does Québec mean to fire?

NESTED NARRATIVES OF FIRE

An answer is not simple. Flame takes on the subtlety and texture of its sustaining biota, and where that biota interacts with a society as complex as Québec's, the complications are squared. A useful approach, however, might consider four nested narratives.

There is, first, a climatic narrative, the transubstantiation of white Canada into green Canada during which a world of ice was

replaced by a world of organic hydrocarbons, which is to say, of fire. The outcome yields a series of concentric fire rings with Hudson Bay (the gray heart of Canada) at its immobile core. Québec cuts across three major rings tundra, boreal forest, and Great Lakes-St. Lawrence forest. Fire is sparing in the first, extravagant in the second, and strongly anthropocentric in the third. The mix of boreal forest and Precambrian Shield - of a firedriven woods intermingled with an intricate, fire-immune matrix of water and rock grants Québec its signature fire regimes and shaped its fire practices. Trying to span from its historic hearth along the St Lawrence into the boreal Shield would challenge Québec as, for example, trying to extend the Code Colbert and the silviculture of the Ardennes into the Mediterranean biota of Provence (much less Corsica and Algeria) would distort the fire history of France. The narrative offers an attractive arc, for it begins with a blank page. Moreover, climate can serve as an archetype or

proxy for all the outside forces that Canadians traditionally see as threatening and against which they have sought protection – economic, political, cultural.

Second, there is a narrative of fire. This may seem odd to the uninitiated, but in fact, fire has its own story, beginning when marine life pumped the atmosphere with oxygen and terrestrial life began to colonize lands in the Devonian. What makes fire's narrative particularly useful, however, is the role of humanity – the holder of a species monopoly over its manipulation. This chronicle has its evolutionary stages: first control over ignition, then control over surface fuels, and finally control over fossil fuels. Call these eras an age of the torch, of the axe, and of the engine.

This schema maps nicely onto the grand contours of Canadian history, yielding the third narrative, that of political Canada. Usefully from a conceptual perspective, the torch was present from the beginning. The reclamation of formerly ice-covered land by life pro-

ceeded, with fire-wielding humans among the throng of colonizing organisms. Certainly by the time a quasi-equilibrium established itself, people were active agents; there is no meaningful era of wilderness into which a migratory humanity strides. People were there from the onset, nipping at the heels of the receding ice. The axe came later, and although it was present before Europeans, its scope was slight. The age of the axe, the era of imperial Canada, coincides with massive slashing for logging and landclearing, which stoked fires both small and huge. The geography of fire was altered fundamentally. Similarly, Confederation coincided with industrialization, that is, with the engine. (One might characterize Confederation as an attempt to keep the U.S. out, Québec in, and the railroads financed.) The geography of industrial combustion reinscribed the geography of Canadian fire and continues to underwrite it today.

The final narrative is one of fire institutions, which is largely a story of governmental organs, both provincial and federal. These appear shortly after Confederation, strengthen measurably during the false spring of Canadian conservation early in the 20th century, and then recede as a national force. Of profound significance was the 1930 decision to transfer the federal estate, including those forest reserves carved out of Rupert's Land, to the provinces. Previously, a Dominion Forestry Branch, modeled closely on the U.S. Forest Service, had established a national presence in forest policy and active land management. Overnight, that disappeared, along with a nationally informed narrative for forestry. Instead, the agency's responsibility for fire management fell to the provinces, leaving the Dominion government to subsidize, plead, and sponsor research. Fire's Canadian story becomes a confederation of narratives.

Among the provinces Québec's fire history is like that of the others – and different. It shares common rhythms of burning with the rest of the circumpolar boreal world. Its his-

tory is similar in some ways to that of other industrial countries, to developments in North America, to the rest of Canada. It shows that broad shift from open burning to closed combustion that effectively defines the era of industrial fire. It shows fire protection institutions in the service of commerce, in this case logging and landclearing. All this is typical of Canada at large.

But more than the others, Québec has innovated institutional arrangements to reconcile government, society, and commerce. In particular, the Société de protection des forêts contre le feu (SOPFEU) and its predecessors deserve wider recognition as inventions as distinctive to Québec as volunteer bushfire brigades are to Australia. The fact is, fire's regimes express the values of the people who use and withhold fire, and can be analyzed to understand the character of their society just as one can scrutinize art, architecture, literature, or institutions of law and economics. An ecological process, a tool, a cultural artifact – fire is all these things.

CONFEDERATION AND CONFLAGRATION

Many places greeted Confederation with bonfires: Ouébec celebrated it with a wave of wildfires. In August 1867, with provincial elections on the horizon, settler slash fires broke free and swept large chunks of the Gaspé Peninsula. In July 1868 an abandoned campfire near the mouth of the Wash-Shee-Shoe River blew up, and over an eight-day period blasted east for 60 km and north for 20. Other blazes joined it, turning vast swathes of the Lower North Shore into embers and smoke. In March 1869 the government empowered a special committee to investigate, boosting its charge to include the question of fires "in any part of the country" and the status of the province's forests generally. From the onset, fire in Québec was a political topic. The challenge was to reconcile the climatic rhythms of the

boreal forest with the social dynamics of political confederation.¹

The Montreal American Forestry Congress was another dozen years in the future, but the committee understood that fires savaged more than the houses of scattered fishermen and obscure villagers. They were the primal force behind deforestation, more pervasive than logging, more cruel than settler clearing. They reckoned that fires destroyed ten times more timber than the axe, and that reburns led not even to scrub regeneration but to barrens. Since 1850 wildfires had burned a majority of the rich pine forests of the Saint-Maurice. The economics of forest fires

^{1.} Quoted in Patrick Blanchet, Forest Fires: The Story of a War (Montreal: Cantos International Publishing Inc., 2003), p. 25. As will be obvious, I rely on this conscientious study for the main chronicle of Québécois fire, and on the research accumulated during Blanchet's inquiry under the direction of Julie Fortin, subsequently held by the Ministère des Ressources naturelles et Fauna, for much of the background sources. All I can claim to add is a comparative perspective and the judgments to which that perspective leads me.

mattered: its lumber industry filled a third of the provincial government's coffers (while subsidies from Ottawa accounted for nearly half). Moreover, logging and farming were often linked into an agro-forestry regime in which settlers logged during the winter and farmed during the summer. Uncontrolled burning threatened it all. Fires repeatedly ravaged the suburbs of Québec City and Montreal; forest fires did the same for their hinterlands. Flame linked city with country. It was a common foe to all Québecois.

But the warp of reform interwove with the woof of irony, for the logic of people did not subsume the logic of fire. Legislation in 1869 and early 1870 was succeeded by *Le grand feu* that rampaged around Lac-Saint-Jean. Its causes were understood: drought, a dry cold front, vast landscapes of slash, unorganized fire protection, settler burns. Its effects were palpable: nearly a fourth of the resident population required immediate aid, a duty that properly fell to government. (In an effort to

rally popular contributions officials even sponsored tours of the devastated region.) In December 1870 the provincial parliament replaced its February forest fires act with another even more stringent in its provisions. That scenario became an unhappy precedent: reform followed by disaster followed by more reform.²

What officials saw was bad behavior and weak institutions, an orgy of uncontrolled slashing and burning, and assumed that better comportment and firmer organs of government could prevent such catastrophes. The political dynamics quickly swirled around three groups, none of which could exist without the others and each of which blamed the others for Québec's fire problem. There was the timber industry, a powerful contributor to provincial revenues. There were the

^{2.} For accounts of the 1870 fires, see BLANCHET, Forest Fires, pp. 30-32, and Claude CAUCHON GODFROY LEMARCHE, Le grand feu de 1870 au Lac Saint-Jean, thesis for the Bachelor of Applied Science (forestry), Laval University, April 1971.

settlers, actively gnawing into hinterland forests, both a complement and a competitor to the timber trade. And there was government, nominally sovereign over the others but in practice seeking both to promote and to check them. Collectively they resembled a child's game of rock-scissors-paper in which none could control the outcome, although each, at various times, assumed ascendancy.

Each group sought fire protection, but defined it differently. The timber industry would have liked fires eliminated altogether. Particularly as it shifted from sawtimber to pulp, industry demanded that government provide fire protection as a matter of public safety and insurance for leased timber berths. Settlers wanted fires controlled but not at the expense of landclearing and fallow burning. Without fire they could not farm or freshen pasture or colonize into new territory. Government supported both industry and colonization, and wanted industry to pay for protection of its berths and settlers to restrain

their burning; most simply it wanted the problem to go away. But when both loggers and settlers complained, blaming the other's excesses and carelessness, it had to find some way to organize for fire protection, to pay for it, and to avoid alienating either constituency. How it did so is the rough narrative of fire in post-Confederation Québec.

This political ménage à trois was present at the creation. In 1869, during a lull between fires, Québec enacted a Colonization Societies Act to subsidize further settlement. The scheme went beyond simple pioneering; colonization meant the permanent settlement of farms and small villages, and as such it became an ideological axiom of both church and state, an expression of identity politics, and a counterweight to Anglophone land companies. It meant both building up and keeping habitants within Québec, not letting them leach into the United States or flow in demographic tributaries to the prairies. It was a means to sustain a traditional society,

although variants could graft local factories onto that rootstock. Revealingly, the colonization movement was promoted heavily by the clergy and ultimately directed by the Catholic Church. The provincial government could thus not openly oppose settlement. It might seek to keep *colons* from burning themselves up along with their surrounding forests, it might condemn outright arson, but it was reluctant to chastise violators too harshly, and it would not ally itself openly with industry against them.

Meanwhile, industry endured its own crisis at Confederation. The collapse of the Reciprocity Treaty damaged the extensive traffic in timber from Canada to the United States, while a legacy of overcutting and rampant fires had gutted most of the accessible pine that had fed the regional mills. The ultimate solution was to evolve from a staple-economy of sawtimber into a highly capitalized factory system of pulp and paper. This took time, which left the search for accessible

new timber reserves as a proximate strategy. The timber industry thus felt itself squeezed by settlers competing for wood and especially by settler fires, which too often bolted beyond clearings into leased timber berths, and they turned to the compromised state for assistance. What officials could do for industry was to assist loggers as it did settlers. It could help industry to help itself. Timber companies would have to organize a fire protection system themselves, an eerie echo of the colonization societies. As the Catholic church oversaw colonization, so timber associations would administer fire protection on their members' limit holdings. The government could bless them in their enterprise, could argue that they needed some oversight, but could not collude overtly with them against agriculture.

The quarrel between farm and forest, each with state sponsorship, endured for decades and transformed the Québec solution into something distinctive. While, in the early years, its fire scene resembled Ontario's,

Ontario was able to install reforms that Québec had invented but could not implement. Québec turned to the Gulf, not the Great West; Ontario, not Québec, became the model for the western provinces. For roughly 30 years, however, the issue of fire protection remained highly public, politically toxic, and institutionally unstable. Each party tried to push the burden onto the other. When the government sought to meet industry's demands, industry shunned it. When the government favored settlers, they dismissed it. All the while, fire, ignoring all parties, kept the cauldron aboil. Le grand feu of 1870 announced a litany of successors. Something would have to intervene from the outside to break down the perfect balance of competing interests. Curiously, that impetus came, if indirectly, from the United States.

INVENTING INSTITUTIONS FOR FIRE PROTECTION

After the Montreal Forestry Congress (1882), the province acted on several of its recommendations, which were those of informed opinion generally. The Department of Crown Lands was particularly predisposed on the matter of forest fires, which it regarded as a "vital question" not only from an "economic and climatic point of view," but even more seriously, from the point of view of "provincial revenue." With an Order-in-Council, the government sought to satisfy loggers by setting aside some regions as forest reserves while confirming settler access to other forests. With a new Fire Act (1883), it proposed stricter controls over ignitions from both landclearing and locomotives. Its boldest provision authorized the establishment, by proclamation, of "fire districts." Each would have a "fire superintendent," who would oversee a complement of fire rangers, one hired by the

government to patrol unlicensed Crown land and the other supplied by industry to shield their limits. As an initial gesture, the government announced 15 fire districts, allocated \$5,000, and awaited payments in kind from an industry publicly avid to ensure fire protection.³

It waited in vain. The state could exhort but not compel. The scheme could work only with industry support, and industry, when the time came, reached for its axes rather than its check blanks. Few companies even responded to Commissioner W.W. Lynch's circular letter. Fatally, the law allowed him to cajole, but not to compel, and without compulsory partici-

^{3.} See Rapport du commissaire des terres de la Couronne de la province de Québec, 1880-81 (Québec: Charles-François Langlois, 1882), p. vi, quoted in Patrick Blanchet, Annales de la protection des forêts contre les incendies, 1868-1924: extraites des rapports gourvernementaux de la province de Québec, vol. 1 (Québec: Ministère des Ressources naturelles et de la Faune), p. 35; Rapport du commissaire des terres de la Couronne de la province de Québec, 1881-82, p. vii, cited in Blanchet, Annales, p. 40. Blanchet, Forest Fires, pp. 39-40.

pation, the scheme fell apart. The fire districts supplied some protection without any cost to industry, and no company wanted, or could afford, to contribute unless all its competitors did likewise. In 1885, after two years of frustration, Commissioner Lynch reported ruefully that, although the system had foundered in Québec, it had been adopted in Ontario. Perhaps, he pondered, the example south of the Ottawa River would inspire a wholesale reconsideration by limit holders north of the river. It did not.⁴

For the 1885 season, the Department managed to field 37 men, nominated by the licensees, with their salaries paid equally by government and industry. The Commissioner thought the outcome "excellent." The corps stopped fires that "might otherwise have become vast conflagrations," they prevented

^{4.} BLANCHET, Forest Fires, pp. 40-41; on Lynch's references to Ontario, see Rapport du commissaire des Terres de la Couronne de la province de Québec, 1885 (Québec: Charles-François Langlois, 1886), p. vi.

careless fire through a "moral effect," and they cited violators of the Fire Act. The licensees, Lynch enthused, asked for more. With less than 20 percent responding at all, there were a lot more licensees to ask as well. By 1887 the fire ranger staff had swelled to 55, the cost had tripled to \$15,000, and the number of enlisted limit holders had bumped from 37 to 40, this out of a pool of limit holders that totaled 194.⁵

The staff were far too few, adequate perhaps on sites flush with recent slash where they could spot and attack fires quickly or compel others to assist, as the law allowed – places like timber berths, colonization clusters, railways, rivers used for log drives. But they could do little about remote regions where, for example, prospectors "wantonly start fires prior to setting out to explore, so that the debris may be cleared off the surface of the rock and the veins exposed," or where

^{5. 1885} quotes from Rapport du commissaire des Terres de la Couronne de la province de Québec, 1885, p. vii.

the "smouldering gun wadding" of hunters could kindle "considerable fire," or where lightning plastered the Shield. Nor could they solve the free rider issue: the problem caused by licensees who refused to contribute, yet benefited by the contributions of others. A solution demanded more than Commissioner Lynch's bright wishes.⁶

There was no better control over settlers. When the National Party came to power in 1887, Premier Honore Mercier openly supported colonization, and as a gesture, abolished the fire districts, which had checked the encroachment of settlers and their torches. If the timber industry was unhappy, they had only themselves to blame; the government had tried to shield them from the settlers, and they had ignored the appeal. Now, in effect,

^{6.} Prospector fires, Rapport du commissaire des terres de la Couronne de la province de Québec, 1886 (Québec: Charles-François Langlois, 1886), p. vii; gun wadding fires, Rapport du commissaire des terres de la Couronne de la province de Québec, 1887 (Québec: Charles-François Langlois, 1887), p. ix.

the government would reverse its emphasis, and seek to shelter the settler from the logger's axe and fire. *Colons* no less than lumber companies, after all, required protection. The railway used by the *Société de colonisation du Témiscamingue*, for example, ran over a rudimentary 4-5 mile track set on tree trunks, over which the engine scattered an endless spray of sparks and soot. The circumstances, although temporary, were no less potentially lethal.⁷

Two years of debate led, in March 1889, to an amended Fire Act based on compulsory contributions from the limit holders. The old fire districts were reactivated, and five new ones created; the government again posted \$5000 to the cause, and it stipulated a fire tax of \$0.0004 per hectare from those holding tenure on Crown land. When the industry bellowed in protest, Attorney General Arthur Turcotte answered that, while it would "be

^{7.} On the locomotive, see Blanchet, *Forest Fires*, pp. 44-45.

best to have" the consent of the licensees, "the Government has the right and can, at any time, establish to protect the public domain..."8 The government would do so with or without industry's consent. In practice, the enterprise was deeply cooperative if primitive. The Department nominated stewards to oversee the fire districts; the companies hired the fire rangers who would do the heavy work of the districts, with the government exercising symbolic jurisdiction by approving those hires and granting legal authority to do their tasks. Both government and industry paid into the general fund. By 1892 the government's contribution had ratcheted up to \$10,000, but a good fraction, like the system itself, lay fallow.9

A change in government in 1892 sparked the next administrative flare up. Commissioner of Crown Lands E.J. Flynn sympathized

^{8.} Blanchet, Forest Fires, pp. 39-40.

^{9.} Blanchet, Forest Fires, pp. 42-43.

with the logging industry and over the next two years ripped out the fittings of the old infrastructure and replaced them. By the onset of summer 1894 he had appointed new stewards, hired W.C.J. Hall to oversee protection for the province, and transformed fire District No. 1 (Upper Ottawa Region), a place vital to provincial revenue and often visited by *les ravages*, into a demonstration forest for fire control. Hall poured half the provincial budget for fire protection into the one district. In April his steward, Narcisse-Edouard Cormier, gathered the principal limit holders to create a specific plan of action. ¹⁰

The reforms, slowly cascading over the next decade, pushed the system to its limits. But they confirmed the principles by which fire protection in Québec would evolve: joint funding, active industry participation, an

^{10.} BLANCHET, Forest Fires, pp. 48-49; see Rapport du commissaire des terres de la Couronne de la province de Québec, 1894 (Québec: Charles-François Langlois), p. viii.

accommodation with settlers, and fire control by a staff of fire rangers both permanent and seasonal. And, one is tempted to add, the tendency to seize on a quiet season as proof that the strategy was succeeding and that additional costs were either ephemeral or necessary but never excessive. No doubt the rangers did impress citizens with the law, and did stop many fires, possibly some big fires; but when the weather turned sour, so did the statistics. Moreover, the prospect of extending the rigor of District No. 1 across Québec was administratively daunting and fiscally ruinous.

That first season the district hired 27 garde-feux. They concentrated where the fires did, along routes of transit, the railways and the rivers. The cost of actual firefighting was split between the government and the associated limit holders. The need to battle those blazes had of course required more hiring, which raised overall expenses, which the industry demanded the government pay. Commissioner Flynn, however, responded by

raising the fire tax. When the limit holders balked, district steward Cormier pointed out that the Ontario system allowed industry far less input and extracted a tax 3.5 times higher. The Commissioner expressed "complete satisfaction" with how the system was performing, for the areas under intense surveillance had suffered no serious fires. By 1897 he was ready to export the experiment; District No. 2 arced from Montreal to the Saint-Maurice River. 11

To fin de siècle Québec the system seemed a practical success. By 1904 the two districts spanned 11 million hectares, some 65 percent of all the licensed timber berths in the province. The fire tax supported 60 rangers, with another 13 dispersed through the remaining Crown lands. The fire tax raised \$9,500, while the government funneled \$7,500 into the protection coffers. The industry accepted the ar-

^{11.} BLANCHET, Forest Fires, pp. 50-54; for quote, see Rapport du commissaire des terres de la Couronne de la province de Québec, 1894 (Québec: Charles-François Langlois), p. viii.

rangement, recognizing that, as District No. 1 steward Norman McCuaig put it, "it is the only system of assurance or protection in the form of practical cooperation that they can adopt." 12 All parties believed the pattern could expand into other regions, and argued that it should. In truth, it was the unprotected lands that increasingly threatened those under intensive surveillance. The ultimate success in the Outaouais and Saint-Maurice demanded, as the Commissioner of Crown Lands declared in 1901, that the same system "be extended to all our other forest areas." 13

That summer Québec was swept by large fires, the most catastrophic since 1889 when the Department of Crown Lands first collected the fire tax. The fires particularly savaged the Lake Témiscamingue region, only opened to colonization in 1898. Some burns, the earliest, had spread from recent settlements in

^{12.} Blanchet, Forest Fires, p. 55.

^{13.} Blanchet, Forest Fires, pp. 54-55.

Ontario before crossing the border; most sprang up in Québec, including within a forest reserve (Des Sauvages). Even the fire protection apparatus of District No. 1 broke down. The whole issue of the forest – how much to convert to agriculture, how much to grant in long tenure to industry, how to protect all of it from fire – converged. Former Commissioner of Crown Lands Simon-Napoleon Parent, now Premier, convened a committee to review the situation. Appropriately, it was labelled the Commission on Colonization.¹⁴

COLONIZATION AND CONSERVATION

Nationally, Canada was preparing to enter a new era of state-sponsored conservation, one formally announced by Wilfred Laurier in 1906; and although Québec would join that effort, its old era still had a ways to run. Indus-

^{14.} Rapport du commissaire des terres de la Couronne de la province de Québec, 1901 (Québec: Charles-François Langlois, 1901), pp. 104-109, and submission by McCuaig, pp. 110-112.

try, settlement, and fires all broke out of their nominal chains.

The Commission on Colonization submitted its 1,500-page report in April, 1904. So far as forest conservation went, it concluded that oversight should be limited to "protection from fire." Is Government would not cease to sponsor colonization even into forested lands but would seek to amend laws that governed burning by settlers. While pulp and paper might promise an economic future for the province, colonization still claimed its heart. Industry held other sentiments. Meetings with limit holders on Districts 1 and 2, as well as on the Gaspé, led to an insurrection on the matter of who should pay for actual firefighting, not simply the salaries of garde-feux funded through the fire tax. In October 1904 the Québec Limits Holders Association proposed to scrap the existing system altogether, demanding that the fire tax and patronage practices

^{15.} BLANCHET, Forest Fires, p. 60.

be abolished, that industry undertake protection with the district stewards as inspectors, and that the actual cost of fire suppression be shared equally by government and industry. The administration failed to impose a common order, each group got what it wanted, and in any event the Parent government imploded, its ambitious reforms deflated.¹⁶

That pushed everything back to the basics, and in December 1905, the government sought a wholesale reorganization by establishing the Québec Forest Protection Service with W.C.J. Hall as head. Hall organized the province into five districts. In a circular letter, the Service announced the abolition of the fire tax and the devolution of responsibility onto the industry, which would hire rangers and prepare monthly reports. The Department would retain responsibility for railways and roads, split the cost of actual firefighting, and issue insignias and posters. If the owners

^{16.} Quote from Blanchet, Forest Fires, p. 60.

failed to provide adequate protection, the government would do it and charge the owner. Meanwhile, it created new forest reserves and dispatched two students, Avila Bédard and Gustave Piché, to receive master's degrees from the new School of Forestry at Yale University, one of the hotbeds of American conservation thinking. Upon their return they injected modern concepts of forest conservation into the Department, and subsequently founded the first French-language forestry journal in North America, La vie forestière et rurale.

It took another half dozen years to square off the foundation. Hall, who had helped lay the original cornerstones, worked on every brick. He promoted a cadre of informants to ensure the limit holders met the terms of the bargain they themselves had proposed. He tinkered with spark arrestors for locomotives. He enlisted Msgr. Laflamme, Dean of Université Laval and, at that time, Director of the Canadian Forestry Association, to rally the clergy

to the promotion of fire protection and to the cause of conservation generally. He pursued settlers who violated the slash laws. He supervised fire suppression on the raw swath of the National Transcontinental Railway. He had rangers plaster the province with prevention posters. He campaigned for a network of towers, telephones, and tool caches, modeled on Maine's. A well-placed lookout, he insisted, "can do as much to prevent forest fires as eighty of the best patrolmen." 17 (The first tower, with phone, rose in 1910.) He organized a rudimentary system of weather stations. His instructions to his guarde-feux, Traité de la protection des forêts contre le feu, written with B.L. O'Hara, became the first handbook for fire control in French. In brief, he implemented, or brought to serious consideration, all the best practices. 18

^{17.} Rapport annuel du ministère des Terres et Forêts de la province de Québec, 1909 (Québec : Charles Pageau, 1909), p. 76.

^{18.} W.C.J. HALL and B.L. O'HARA, Traité de la protection des forêts contre le feu (Québec: Telegraph Printing Co, 1912).

Results, while tangible, concluded with an eerily familiar scenario: a wave of reforms followed by a wave of fires as a long wave of drought gripped much of the country. In 1908 desiccation rippled across the continent along the U.S. border, succeeded in the autumn by a riptide of flame along that frontier, sucking in whole communities from Fernie to Porcupine. Even the Department's "army of fire rangers" was spared disaster mostly by luck and the whims of weather; so dense was the smoke that it was impossible to say what was burning where. Yet when the scene was repeated in 1911, it was Ontario, not Québec, that suffered most catastrophically. The Québec

For a summary of the early era, see G.C. PICHÉ, "L'histoire de l'administration des forêts dans la province de Québec," Canadian Forestry Journal VII(1) (January-February 1911), pp. 20-21. And for Hall himself, see his obituary: "Death W.C.J. Hall," Canadian Forestry Journal XVI(3) (March 1920), p. 138. The best summary of Hall's reforms is in BLANCHET, Forest Fires, pp. 68-78.

Forest Protection Service lost one ranger to a heart attack. Ontario lost whole settlements.

As the province weathered more fire seasons, Hall proclaimed the system a reasonable success, despite its lack of comprehensiveness and intensity. He mistrusted an industry that had not agreed to grasp all the duties that were required instead of dodging those responsibilities it disliked, yet he was no less leery of a colonization movement that thrust newcomers into raw-slashed countryside. In 1911 the rural population of Québec stood at 62 percent of the total, and remained active in clearing new lands. W.C.J. Hall, like those fire officers who followed, found himself caught between ethnicity and economics, the politics of identity and the politics of industry, and understood only too well how their friction could lead to conflagration. So exquisitely was the political dynamic balanced, however, that a defibrillating jolt sufficient to unstick the deadlock would have to come from the outside.

It came, obliquely, from the United States. Worried that it would never become more than a hewer of wood, Canada began restricting the export of logs. Foreign companies would have to erect mills within Canada, and then export the value-added products; in the early years of the 20th century, this meant pulp and paper. Québec forbade log exports in 1910. Within a year American manufacturers, dazzled by the demand for newsprint in particular, established plants in the province, clustering particularly near Trois-Rivières, their timber flowing from the watersheds of the Saint-Mauricie.

In keeping with that geography, three streams also fed into a final consolidation of the Québec strategy of fire protection. One was the transfer of responsibility to the limit holders. The chief limitation, however, was that the licensees were not organized among themselves: each limit holder provided protection only on his own lands. The second contributor was a tradition within the

Mauricie River Valley of cooperative endeavors for floating timber. Since 1903, the St. Maurice Boom & Log Driving Association had coordinated transport to the mills. In 1908 Ellwood Wilson, the Superintendent of the Forestry Division of the Laurentide Pulp and Paper Company, got permission to organize a special fire protection force for his company's prime holdings; the next year he proposed to elaborate this scheme by combining it with the tradition of mutually rafting logs. Cooperative firefighting would complement cooperative log driving. As a test case, he organized an association to guard the timber along the National Transcontinental Railway which passed, dangerously, through their limits. The question of How to expand that service led to the third tributary, the American example of "cooperative fire protection." 19

^{19.} See BLANCHET, Forest Fires, pp. 84-85; George E. BOTHWELL, "Co-operative Forest Fire Protection," Forestry Branch Bulletin No. 42 (Ottawa: Government Printing

As George Bothwell reported to the Dominion Forestry Branch, "Although in Canada the original idea of co-operative protection among lumbermen was conceived independently of American influence," once instituted it "followed closely in the steps of the older fire-protective associations in the United States."²⁰ Originating in 1906, timber protection associations had propagated themselves from a nominal origin in Idaho throughout the Great Lakes and northeastern U.S. In the spring of 1912 Wilson convened sixteen owners in Montreal to "exploit, establish and put into operation a complete and efficient fire protection system for all the woodlands of the St. Maurice Valley."21 W.R. Brown, a dual

Office, 1914), p. 11; and Ellwood Wilson, "Forest Fire and Forest Protection," *Canadian Forestry Journal IV*(1) (March 1908), pp. 102-105.

^{20.} BOTHWELL, "Co-operative Forest Fire Protection,"

^{21.} BOTHWELL, "Co-operative Forest Fire Protection," p. 15.

resident of Québec and New Hampshire familiar with the timber protective protection associations in the U.S., served as vice president and helped transfer knowledge into the drafting of the articles of agreement. The provincial Minister of Lands and Forests appeared, and expressed his approval. The outcome was the St. Maurice Forest Protective Association.

The scheme was a sensation. Henri Sorgius, formerly of the Protection Service and a protégé of Piché, assumed the role of general manager, and outlined a "working plan" to beat down the fire menace. The railroad companies assisted with railway patrols. The Québec government contributed funds to bring unlicensed Crown lands into the scheme, agreed to pay half the cost of lookout towers, and funded half the expenses of actual firefighting. *Garde-feux* patrolled by canoe and horseback in what resembled nothing so much as an avatar of the *voyageur*. The *Canadian Forestry Journal* boasted that this "pio-

neer work" of institution-building would "soon be widely copied throughout Canada."²²

It did spin off copies – in Québec. In 1914 the Ottawa Forest Protective Association received letters patent; by 1917 other associations appeared – the Laurentian and the Southern St. Lawrence; the proliferating groups, in turn, banded together to form the Québec Forest Protective Association. In March, 1919 the government made compulsory what logic and convenience were urging: it required all timber companies to join an association or otherwise contribute. Five years later, the law broadened from large landowners and limit holders to those with private forests of more than 800 hectares. Two more associations joined in 1924 and 1927. The Québec Forest

^{22.} See Henry SORGIUS, "The Working Plan of the St. Maurice Protective Association," *Canadian Forestry Journal XI*(11) (November 1915), pp. 247-249; ANONYMOUS, "St. Maurice Forest Protective Association," *Canadian Forestry Journal IX*(3) (March 1913), p. 37.

Protection Service, supplying protection for unleased lands, became in effect one more association, although a *primus inter pares*. The Québec strategy was now complete.²³

By 1917, however, the Canadian Forestry Journal had reversed its earlier judgment that all Canada would emulate Québec; it would not. The other provinces refused to surrender control to industry, preferring to tax and provide the service themselves or more closely regulate industry contributions. Even the American associations dwindled or were gradually absorbed, through the medium of cooperative agreements, into the connective tissue of the U.S. Forest Service. In North America Québec alone provided an institutional refuge. But there the Associations flourished. With minor amendments, they endured for another 60 years. George Bothwell,

^{23.} ANONYMOUS, "Four Fire Associations Now Blanket Québec," Canadian Forestry Journal XIII(5) (May 1917), p. 1098.

reporting on the St. Maurice, marveled at the "remarkable rapidity with which economical and efficient patrol can be secured over large areas." Steadily, the size, sophistication, and power of the Protection Service overseeing the Associations increased, so that even as the number of fires rose, the amount of burned area fell. The Association strategy, moreover, unburdened the endeavor from government patronage and undue political meddling. 25

Innovation sparked innovation. Probably the most celebrated experiment came in 1919 when Wilson, on behalf of the Saint-Maurice Association, seized on the availability of a dozen Curtiss HS-2L hydroplanes that the American government had donated to Canada. In

^{24.} BOTHWELL, "Co-operative Forest Fire Protection," p. 16.

^{25.} For an excellent survey of the origins and subsequent evolution, see S. Jensen, "Organisation of forest protection in the St. Maurice Valley," *La Forêt Québécoise*, December 1943, pp. 274-290; BOTHWELL, "Co-operative Forest Fire Protection," p. 16.

May, along with allies in the Forestry Branch and aviation, Wilson petitioned the Minister of Canadian Naval Affairs to make available two such planes for an experiment in aerial fire protection. The Minister agreed, and Wilson solicited the necessary funds from the Department (\$2,000) and by a special assessment on the Association (\$8,000). A 22-yearold war veteran, Stuart Graham, accompanied by his wife, as navigator, and a mechanic, flew the newly christened La Vigilance from Halifax to Trois-Rivieres – a romantic gesture, not a little daring for taking a seaplane over land. The crew stopped one night at Saint John for opera and spent another, unplanned evening at a logging camp at Eagle Lake, Maine when weather forced them to land. They saluted Québec City with an overflight, dropped leaflets over Trois-Rivieres, and generally created a sensation. Then the crew returned to Halifax to deliver a second plane. Wilson subsequently arranged for company directors and the scheme's promoters to take a joyride in the plane.²⁶

The problem, of course, was cost. Aerial reconnaissance alone could not justify such expensive machinery, and even adding aerial photography and some transport could not boost the program into profitability; erecting towers was still cheaper than renting planes. Wilson, unable to convince the Association to continue, persuaded his own company, the Laurentide, to pursue the project for another season. In 1920 the Dominion Air Board established its trial network, with one station at Roberval. The Department invested seriously in the experiment, so that Associations preferred to call on the government-funded air service as needed rather than create their own.

^{26.} BLANCHET, Forest Fires, p. 141; Stuart GRAHAM, "The First Flying Patrol of Forests," Canadian Forestry Journal XV(5) (June 1919), pp. 243-244. For the preliminaries, see Major K.E. KENNEDY, "Guarding Forests by Airplane, Canadian Forestry Journal XIV(2) (February 1918), pp. 1521-1524.

But while spectacular, a scheme of protection that had to answer first to the laws of economics found the planes better to watch than to own. Although trials bubbled up now and again, not until the 1950s would aircraft become a permanent feature of the Québec scene.²⁷

But even as aircraft made firefighting glamorous, conservation as a doctrine with state sponsorship was collapsing, and the capacity to actually fight full-throated boreal fires hit sharp limits. By the time Graham circled Québec City, the Commission on Conservation had gone into receivership. The era's bold reforms had been real enough, however. By 1923, when the British Empire Forestry Conference convened in Canada, the Québec Forest Protection Service had metamorphosed into a Forest Service and had watched its budget explode from \$10,000 a year to \$415,000 and its roster swell to include 2,027 men, including

^{27.} Blanchet, Forest Fires, pp. 145-146.

113 inspectors and assistant inspectors, 1,157 fire rangers, and 757 assistant and special fire rangers. Yet for all this, Québec suffered its worst year on record in 1923, as some three million acres burned. Piché argued that such fires were particularly damaging – worse than "wasteful lumbering," "useless settlement," and insect epidemics – because they ruined the soil; especially horrific were recurring fires in brulé²⁸. The record of Québec's past fire history was written in its forests, and in its barrens. What couldn't be prevented might be salvaged by emergency felling, even if the logs were only dumped into lakes and streams until they could be transported later.²⁹

^{28.} The word "brulé", meaning "old burns", does not appear in English dictionaries and is not much used today except in French forestry. It was commonly used among Canadian foresters in Piché's time.

^{29.} Quotes and figures from Gustave PICHÉ, "1924 Forest Fire Conference," National Archives of Canada, RG 39, Vol. 597, pp. 26-27; and G.C. PICHÉ, "Québec," Second British Empire Forestry Conference, 1923. Proceedings and Resolutions (Ottawa: F.A. Acland, 1927), pp. 188-195.

In musing over reforms, Piché noted the enduring problem of slash, the need to render the staff of the fire protection service more permanent, and the blind insistence that Québec was a "pays essentiellement agricole," when any rational mind would declare it a "pays essentiellement forestier." Still, he admitted the value of "clemency and persuasion" over "punishment" when dealing with fire-careless settlers.30 On this subject the Minister for Lands and Forests, Honoré Mercier, agreed. The basis for Québec's forestry policy must be, "without doubt," the protection of the woods against fire. The government had aided the Protective Associations. Each year, he observed, "firefighting has cost more to the Government than to all limit holders put together." But the government had aided and would continue to aid the Colonization Societies as well. Moreover, he considered it the

^{30.} See Piche, Québec, Second British Empire Forestry Conference, p. 195.

"duty of the powerful, the rich and the Government to protect the poor settler, the poor forest worker." After all, colonization had government sponsorship, and besides, he reasoned, "why risk the enmity of the settlers when we can only lose?" That was an argument that he could have applied as well to loggers, and it was a logic not heard elsewhere in Canada. 32

The new round of conflagrations were attributed to drought, maybe to the sunspot cycle, not to any fundamental flaw in the organization, save the need for more of everything. A minister from New Brunswick thought it "remarkable" that after such investments, experience, and "increased protection," Québec should get "the worst fires on record." More unseemly, the British Empire Forestry Conference conducted its field excursion

^{31.} Quoted in Blanchet, Forest Fires, p. 100.

^{32.} See Oscar DESJARDINS, "De l'organisation du service de protection contre l'incendie dans la région du Témiscamingue," *La Vie forestière* (June 1931), p. 7.

through Québec under a pall of smoke. Yet Piché could trot out the usual explanations, not unreasonable, regarding drought, rapid accumulation of slash, and reburns in brulé. But the paradox glared back, regardless. The situation, he insisted, would have been far worse without the Québec Forest Protection Service in place. The solution to breakdowns was more system, more funds, more thorough coverage.³³

^{33.} C.W. ROBINSON, "1924 Forest Fire Conference," National Archives of Canada, RG 39, Vol. 597, File "1924 Forest Fire Conference," p. 31. See G.C. PICHÉ, Notes on the Forests of Québec (Québec: Telegraph Printing Co., 1923); and PICHÉ, "Rapport sur la protection des forêts par G.C. PICHÉ, chef du service forestier, 27 septembre 1923," appendix No. 14, Rapport sur la protection des forêts dans la province de Québec durant l'année 1922–23 (Québec: Ls-A. Proulx), 1924.

A LONGUE DURÉE

The 1923 British Empire Forestry Conference helped spark a national Forest Fire Conference, held in Ottawa in January, 1924. Soon afterwards, Gustave Piché resigned, ceding administration to a protégé, Henry Kieffer. With that gesture, the heroic age of Québec ceased, and a silver age commenced best characterized by steady, incremental improvements under the reign of a longserving administrator. A professional forester, first hired in 1908, Kieffer remained head of the Protection Service until 1962. Through depression and world war, through dry spells and wet, juggling colons, garde-feux, and an ever-dominant pulp industry, over the course of his lengthy tenure Kieffer built up an organization that did everything required of it.

Over the years, the system reduced the area burned. After the 1923 outbreak and after the drought-blasted big years of the early 1930s, the system had steadily strangled fire

from the land. Burned area, on average, sank, and, although big fires still erupted, they too became gradually fewer and smaller. In timehonored fashion, the protection organizations attributed success to their own diligence, determination, and system, and their nominal failures to weather and inadequate funding. Still, big fires happened. The 1932 fires claimed 415,676 hectares; the 1941 fires blew away hectares, and prompted Departmental conference that led to the important reforms in the postwar period. The first blowout could be dismissed as the outcome of drought, incomplete coverage, and settler slash. The second seemingly followed from drought, increased industry slash and thinned staffing, both associated with the war effort. A lesser, if significant breakout occurred in 1944, some 242,738 hectares. From 1948-1955, comparable fires hit in five out of seven years. There was an anomalous echo in 1962, followed by another series of serious fire years in 1967-68. The old, odd decadal rhythm of big burns seemed to hold, even as ignition began to shift from people to lightning (80 percent of area burned in 1970).³⁴

Over the decades, too, the flaws in the system shrank along with the acres burned. A major obstacle was simply the sheer size of the enterprise: the difficulty of "force enough fast enough," of getting firefighters and pumps to the scene early. That had to wait for better roads, and particularly aircraft. Moreover, personnel needed modernizing as well as pumps and planes. It was no longer enough, as it had been from the beginning, to rely on the compulsory conscription of local men, with or without much training, to fight fires. Fire protection demanded more than raw grunt labor-digging, chopping, sawing with little compensation; rangers needed to know more than their legal right to commandeer that

^{34.} See Le congres de protection, Extrait de rapport de Ministere des Terres et Forêts de la Province de Québec, Pour l'annee finissant le 31 mars 1942 (Québec: Rédemptis Paradis), pp. 26-41.

labor. In 1947 the Protection Service resolved that issue by endowing the Duchesnay Forest Protection School.

The more serious lapse lay with the nature of what was protected and what not. Large swathes still lay beyond the pale. In 1944 the Protection Service confirmed its informal practice by declaring a line of control along the 51st parallel. That left unresolved the much trickier question of small landowners (with less than 800 hectares) whom the law did not compel to join protection associations and whose holdings lay mostly around villages. Kieffer's solution was to convince the municipalities to undertake the necessary fire services by sharing their expenses. In effect, the Forest Protection Service acted toward the municipalities as the government did toward the Associations.35

^{35.} Georges-Henri BERNIER, "Distribution des forêts de la province au point de vue protection contre l'incendie," *La Forêt québécoise* 7(3) (March 1944), pp. 142-143.

A sound idea, but one fatally weakened for the same reason that volunteerism had failed with industry: without compulsion, few municipalities signed on. This particular flaw had festered since the beginning of forest conservation, worsening as a significant fraction of cutting came from small private landowners (in 1959, roughly a quarter of timber felled), fluffing those landscapes with fresh slash. Not until large fires sacked just such areas outside Trois-Rivieres in 1949, however, and the Québec Forestry Association (created in 1939) took up the cause in 1955, did the scheme get traction. In 1956 the Department officially acknowledged the role of municipal fire ranger; a dozen years later the government boosted to \$2,000 the amount it would contribute for equipment. The villages, however, still balked. It was clear that compliance would take a yet more fundamental reform.36

^{36.} Blanchet, Forest Fires, pp. 104-107.

It would also have to strike at the old feud between foresters and settlers. Even with a permit system, slash burning continued to account for 25-50 percent of all fires. Only lightning in remote regions burned more area, but that, until the timber industry pushed into such sites, wrought little economic damage. Settler slash, however, threatened villages, farms, and timber berths. Every official of the Protection Service had, at one time or another, railed against reckless slash burning, and every one eventually had to segregate complaints against poor practice from statesponsored colonization itself. The 1921 and 1922 seasons had provoked warnings from industry that fires would cripple its supply of timber. Piché had pitched in, pointing to the contradiction between a stable industry and . an aggressive colonization, and a dilemma that left the Protection Service caught in the middle of an ancient blood feud between the farmer and the forester, while the 1923 season soared to new records for damage. Yet the

Service had, in the end, to recant. It could not, politically, pit colonization against forestry, and the government was unwilling to assert direct control over either.

In 1926, Deputy Chief of the Department Avila Bédard tried to reconcile the two by arguing that fire protection was necessary to everyone. In La Forêt et la Ferme he affirmed, in principle, the economic link between woods and field, and accepted that in a stilldeveloping country, land would be broken and slash burned. He argued only to reduce waste, improve relations, and prevent the promiscuous burning that led to wildfires. But even slash had its symbolism, its political voices, and its poets. Both church and state not only sanctioned but sponsored colonization, and to regulate the free use of settler fire was to regulate the character of the colonization upon which Québec's future identity putatively rested. In 1943 Felix-Antoine Savard even wrote a long verse in celebration of l'abatis, full of classical if hallucinatory

allusions to Euphronius, Perseus, and Heracles, in which the slash burner appeared as a mythical slayer of demons. Against such rhetoric an appeal to a program of burning by forester-supervised permit was politically impotent.³⁷

What ultimately changes the rural fire scene are changes in that rural scene itself. In industrializing countries a cycle of rural burning lasts roughly 60 years, which was the span for the American Great Lakes. Québec's special politics warped that simple model by forcibly rekindling state-sponsored colonization and extending the duration of rural practices. Even so, from the Commission on Conservation to the onset of a new regime some 60 years did pass. By 1956, even as the Tremblay Report argued for provincial autonomy and for the state as the "defender of a threatened culture," the future of Québec no longer depended on a colonizing world of

^{37.} Blanchet, Forest Fires, pp. 119-120, 171.

rural parishes. The capital-intensive demands of the pulp industry had lessened the need for rude labor. The economy was truly industrializing, the population becoming more metropolitan, the society more secular. Colonization ceased, and farm abandonment escalated. Between 1941 and 1971, Québec lost two thirds of its farms; by 1955 slash burning had dropped from a dominant cause of wildfire to a negligible one. Instead of cultural integrity through internal colonization, a kind of soft ethnic cleansing set in, forcing the alien residents to emigrate. Québec's Quiet Revolution would also be a visually silent one. There would be no repetition of the conflagrations that had followed Confederation.³⁸

^{38.} Quote from John A. DICKINSON and Brian YOUNG, A Short History of Québec, 2nd ed. (Toronto: Copp Clark Pittman, 1993), p. 283; statistics on farms, p. 266.

FIRE'S QUIET REVOLUTION

During the 1960s, it was as though an immense iceberg overturned. Henri Kieffer retired. The Protection Service reorganized the increasingly archaic institutional structure into 10 regions. Aircraft became common, then abundant and essential. In 1962, lookout towers still formed the backbone of the provincial detection system; by 1970 the towers were gone, replaced by aerial observers. In 1961 the Service tested two Canso PBY-5A for water bombing; by 1971 it was flying three Canadair CL-215s, the only aircraft designed specifically for firefighting and one conveniently manufactured in Québec, the first of a fleet of 15. In 1967 the Service adopted the Fire Weather Index, the national fire danger rating system devised by the Canadian Forestry Service, and set about adapting it to Québec's circumstances. There was a moral here. for unlike typical Ottawa grants, this one came with no political strings. It was a free gift from the Dominion, to be accepted or rejected by the province, yet it was also, latently, a nationalizing force, quietly aligning the provinces under a common regimen of language, procedures, and standards. That arrangement suggested how Québec might align further with the rest of the Canadian Confederation.

Québec's very success, however, argued for a commitment beyond fire's suppression. Québec needed to move beyond simple firefighting and into a more robust conception of conservation, eventually segueing into something like sustainability. The government needed, that is, a more comprehensive and rational structure not only for the fire services but for all forest threats and for pumping up forest regeneration and improving its quality. In Hall's and Piché's day, it had been enough to prevent the brulé from burning over and over again; that would allow a new woods to replace the burned one. By the late 1960s, conservation demanded more, and the provincial government was more willing to assert

itself, to become more *dirigiste*, no longer forced to balance colonization against industry. Although industry stalled, wary of a return of levies such as those they had beaten back at the start of the century, all parties reached agreement in April 1970 to fundamentally restructure the entire scheme. But if *les colons* were no longer a factor, *les feux* were. The summer of 1971 witnessed the largest surge of burning since 1941. The fires that swept through 212,050 hectares weren't listening to legalistic qualms, historic squabbles, and the special pleadings of a distinctive society. Within a year, the reorganization was a fact.³⁹

By this act the Department of Lands and Forests at last asserted its supremacy. It effectively nationalized fire protection, as the Québec government did hydropower. It created a Conservation Branch within the Department, dissolved the 39 Associations and reorganized them into seven regional "conser-

^{39.} Blanchet, Forest Fires, pp. 165-166.

vation societies," and assumed responsibility for protection over even small private holdings. The system no longer had excuses due to confused jurisdictions or incomplete coverage. Behind this assertion lay a new reality of land and society: Québec was neither a farm nor a woodlot; its economic future lay in industry and services. In 1922 the inaugural issue of *La Vie forestière et rurale* could claim that for "un pays comme le nôtre" both forestry and colonization were necessary. By 1992, when the wheels of reform had fully turned, that old polarization had no meaning except as an archaic symbol. 40

The colonization movements of the future lay in the north and on the Shield, and not with agricultural villages but with exurban enclaves and hydropower. The James Bay scheme replaced Témiscamingue. The program had more than symbolic meaning for fire

^{40.} Blanchet, Forest Fires, p. 166. See La Vie forestière et rurale, May 1922, p. 2.

protection, however, since its roads and construction would kindle fires and the security of its reservoirs depended in part on the security of their catchments. For decades fire protection had scratched a line of control roughly along the 51st parallel; now it would leap over it into the boreal bush. Here was a new Québec, powered by a new economy, and one that required, however reluctantly, a new arrangement for managing fire. And just as Québec Hydro had to grapple with a gauntlet of environmental concerns quite unlike anything mining, logging, or damming had to endure earlier, so would fire. Feebly, then with mounting urgency, the role of fire cried out for reexamination.

This being Québec, these reforms were out of sync with those of the other provinces, yet being Canadian it found itself swept up in common concerns. The revolution that struck most provinces in the early 1980s first came to Québec a decade before the others, and waited for completion until a decade afterwards. The

shockwaves from big fires that forced so many others into reorganization, Québec had already experienced, and accomplished the critical reforms. Nationally, as the provinces groped toward a mechanism to cope with conflagrations that no province could handle by itself, Québec was in a position to bargain, not plead. The countrywide restructuring, especially the commitment to a fleet of aircraft, in fact served Québec twice, once by helping it to share the cost of its own planes and again by creating a market for the aircraft its industry built and exported.

So if Québec's fire institutions were distinctive, they were also capable of integrating into larger structures that could respond to crises, although it remained uncertain where Québec might look for such alliances, and what price it and others would demand for such an arrangement. It mattered, then, that it turned, if hesitantly, to Canada's emerging national infrastructure, symbolized by the Canadian Interagency Forest Fire Centre (CIFFC).

In nature's economy, fire behaved much like commodities in an extractive economy, with the costs of fire protection akin to prices that boomed and crashed, for reasons well outside the control of fire agencies; both imposed a similar logic of mergers to cope with those wide and occasionally violent swings in demand. The airplane, in brief, did for the economics of fire protection what the railroad had for early Canadian nationalism. Mergers might be eager, reluctant, or forced, but they would come.

These matters had been openly discussed since the early 1920s. What galvanized action was the United States, which sought a more formal accord with Canada to replace the proliferation of separate mutual aid agreements that the provinces were devising across the border. Since the U.S. had a National Interagency Fire Center (NIFC) to oversee the dispatch of aid to major fires, a treaty would subject Canada's provinces to the identical process. The claims of Canada's provinces

would, separately, be ranked in priority by the NIFC. The alternative was for Canadians to create a counterpart that would evaluate and rank provincial requests before appealing to the U.S. The result was the CIFFC, which, revealingly, was not a government institution (like the NIFC) but a corporation to which Ottawa contributed and which the provinces could join without surrendering any authority over what they did or did not do within their own land. Still, Québec balked-refusing to join the signatories until over a year later. Even a public corporation demanded common standards and protocols in order to exchange crews, pumps, and planes. But Québec could not control fires on its own, and the alternative to CIFFC was to rely on the U.S. through the Northeastern Forest Fire Compact, which would funnel extraordinary requests for help through the NIFC.

A THIRD SOLITUDE

Today, the historic conditions have become oddly inverted. An exurban colonization is replacing an agrarian one, and the thrust of fire institutions is to protect nature reserves as well as raw timber. All the provinces are realigning with the gravitational pull of these movements, - Québec among them - although at different rates, Québec perhaps a bit slower and more cautious than most. Québec and Canada had learned they needed each other, and were more comfortable with that historic relationship, however awkward, than with seeking other alliances, particularly with the United States. Although the fire treaty created a NAFTA for firefighting, the provinces, Québec among them, preferred to meet the U.S. through a collective Canadian institution than confront it alone. Ironically, the more Québec claimed for itself, the more firmly embedded it seemed to be within the Canadian confederation.

In the end, Québec's fire program looked more like the rest of Canada than it ever had. It faced similar problems, defined them by similar means, addressed them by similar tools. It conceived of its forests in the same commercial way as the rest of Canada, and approached fire with the same instrumentalism that the other provinces did. (The exceptional province was the Northwest Territories, where fur replaced timber and First Nations demanded control over fire institutions to support their distinctive societies.) If fire's northern economy required mergers, Québec preferred to merge with the devil it knew rather than the Great Satan to the south. It defaulted to the historic dialectic, assuming it could again direct that discourse to its own goals.

But even continental mergers had limits. Like the rest of Canada, Québec struggled to appreciate the positive role of fire, the fact that the issue was not simply to protect against unwanted burn but to promote the burning that progressive conservation increasingly

deemed necessary. Nature protection, often on a grand scale, is a trait of industrialized societies, no less in Québec than elsewhere, and it would mean that Ouébec had to accommodate flame, and perhaps even introduce it, in ways unthinkable to its past. Prescribed fire for habitat would replace slash burning; and it would be, for agencies of government, a mandate. This conception lay almost wholly outside the discourse that had tracked fire's institutional history not only in Québec but throughout Canada; only Parks Canada seriously grappled with its significance. If accepted, the thesis meant that the apparatus built up over a century had to be redirected. In that perception lay fire's true quiet revolution in Ouébec.

It is a revolution barely acknowledged, much less accepted. Fire had not been a signatory to reforms governing its administration; it obeyed no logic save lightning, drought, wind, and combustibles suitably arrayed. Flame claimed its own sovereignty, as ecologi-

cally insistent by its absence as by its presence. Worse, fires were compounded with other disturbances - with insects, disease, ice and wind storms, a witches' brew of wrecked forests. Then came the summer of 2005, the worst since 1932, and smoke again spread wide palls across the land. The question posed after the 1923 outbreak - why, after all the proper reforms had been enacted, fire still rampaged was harder to answer. It required a reconceptualization of fire management beyond the customary demand for more pumps, planes, and plans for reorganization. It required an admission of fire's complex autonomy. That was a task even the most ardent sovereignist was unwilling to contemplate.

Fire, however, neither obeyed nor listened nor even negotiated. It stood outside the historic dialectic that had defined Québec's understanding of itself, a third solitude. Admitted or not, Québec remained a country of fire, with a natural memory far deeper than that of any of its occupying societies.