"Determined to burn off the entire country"

Prospectors, Caribou, and the Denesuliné in Northern Saskatchewan, 1900–1940

ANTHONY G. GULIG

If winter and summer in southern Saskatchewan are known for snow and dust respectively, in the north ice and fire are the harbingers of these very separate seasons. In fact, often shortly after the spring ice breakup, fires ravage a significant portion of northern Saskatchewan every summer. But even if so immediately destructive, at least outwardly, fire has always had a significant and meaningful place in the northern ecosystem. Recent studies of the historic effects of fire on the boreal forest suggest that, at least on average, fires burned any given area in the forest of the collective provincial north about once every sixty or seventy years, with some areas experiencing fire only once every two hundred years or more. The historic frequency and extent of fires in the boreal forest has shaped plant communities and, as a result, animal and human communities in the area as well. It was, and remains, a fire-dependant ecosystem.[1] While modern (post–World War II) fire suppression efforts readily and actively acknowledge that fire is an integral part of the northern forest, concern over human safety, individual property, and forest resources, namely timber for pulp and lumber, has caused the province to aggressively combat, or at least carefully manage and monitor, many fires in the northern forest.

I experienced these fire suppression efforts firsthand a few years ago. While canoeing the Churchill River system in north-central Saskatchewan looking for the original benchmarks placed by federal geological surveyors in the early twentieth century, a colleague and I made our way through the quickly gathering smoke on Besnard Lake. Given the direction and velocity of the wind, we placed the nearby fire producing the smoke through which we were paddling not more than ten or fifteen miles to the west. We knew the provincial water bombers were working the fire because the spotter planes leading the larger tankers on the best approach were audible overhead. Then in the coolness of the May morning we listened nervously as somewhere overhead in the smoke the sound of the larger, throaty engines of a water bomber grew louder. Suddenly, the engines of the still invisible airplane slowed to an idle. Seconds later, a very

large yellow shape appeared about one hundred meters above and gracefully skidded onto the lake in front of us, coasting along and gathering up water for the next run over the nearby blaze. Quickly throttling up, the large Canadair CL215 labored up into the smoke to again douse the fire. We learned later that a large fire was growing east of Pinehouse Lake. A massive effort was aimed mainly at protecting the small community of Pinehouse, located on the western shore midway up the lake. A few weeks later, with nearly continuous efforts from the air and ground, the fire was controlled and finally extinguished.

Years earlier, before the advent of water bombers or other concerted and well-organized efforts on the ground, such a fire likely would have burned itself out only after many weeks or even months of repeated cycles of smoldering and flaring. Relief often came only with cooling temperatures in late August, or at the very latest, with the first October snowfall. Although fire remains an important part of the northern ecosystem, the frequency and severity of fire in the boreal forest has certainly increased dramatically in the twentieth century—a direct result of new human activity in the region. While the historic use of fire in aboriginal communities is well documented, fire was rarely used to modify significant parts of the northern environment.[2] When historic aboriginal communities employed fire as a tool, it was used cautiously and selectively with the intent of modifying certain, limited areas of the environment. Fires were set to control or manage, among other things, the forest proximate to trap lines or to protect encampments from the accumulation of natural forest fuels. Burning was regulated by the season in which it occurred and was carefully applied with special concern for prevailing winds and the general condition of the forest in the region. It was, by all accounts, a systematic, limited, and reasoned approach to managing a selected part of the local environment.[3]

Fires were also used by Euro-Canadian settlers in their gradual move into the northern portions of Saskatchewan in the early twentieth century. It was, after all, a widely recognized and powerfully effective tool for clearing what was hoped would become a valuable agricultural homeland. However, these set fires all too often got out of hand. Newcomers to the provincial north simply did not understand the rapidity with which fires in the parkland or boreal forest could spread, especially when prevailing winds and seasonal dryness were ignored. In 1908, for example, a vast area just north of Prince Albert was burned when set fires, designed to maintain grasslands and drying sloughs where marsh hay was grown, burned out of control and spread into the nearby parkland and forest. Several farmhouses, over fifty tons of cut and stored hay, as well as hundreds of cords of cut wood were destroyed by the blaze. The province's chief fire warden was furious and promised to make examples of those who allowed the fire to spread out of control.[4] The frequency and size of forest fires increased with the influx of newcomers to northern Saskatchewan.

While some used fire, however errantly, as a tool to increase the land's agricultural potential, others used it to open up the dense, otherwise nearly impenetrable northern forests. This was especially the case once rumors spread that northern Saskatchewan held substantial deposits of valuable minerals, and in 1906 nothing caused that word to spread faster than stories of gold. The immediate result was a predictable and substantial, if fleeting, influx of prospectors in search of gold and other valuable minerals.[5]

The number of new settlers steadily increased in the region. By 1907 and 1908 a few mineral prospectors made their way as far north as the Churchill River and many even wintered in the region. In the next decade and after, the pace increased as newcomer interests, especially prospectors keenly focused on the mineral potential of the area, continued to grow along much of the Churchill River basin, pushing as far north as Cree, Wollaston, Reindeer, and Athabasca Lakes.[6] For some, the draw was clearly in the romantic vision of the north and the distance from an otherwise civilized world. Others, it was equally clear, were driven to the north by the economic troubles of the era.[7] In fact, the discovery of gold in several northern locations drew thousands of newcomers to the region. Near the northeastern end of Lake Athabasca, for example, Goldfields, the most populous city north of La Ronge, had more than one thousand non-Indian residents by 1936.[8] With the acceleration of newcomers came an expanded official, or governmental, presence in the region bent on monitoring and supervising new northern activities. Even so, that monitoring and supervision did little to protect and less to preserve northern resources. Of course, preservation in the modern sense had little to do with these historical realities. Commercial exploitation and economic profits meant harvesting and exporting resources to waiting southern markets. The agents charged with monitoring and supervising northern development in Saskatchewan—the ever-growing force of game guardians and Mounties—turned out to be little more than record keepers and did little to effect resource protection or conservation.

In nearly every location, soon after newcomers arrived, either in search of gold, fur, game, fish, or simply adventure, there was a marked increase in the number of substantial forest fires. The rate and extent of such fires in the north steadily increased for decades.[9] It would not be until the postwar years, however, that a direct connection would be made between the increase in non-Indian inhabitants in northern Saskatchewan and the growing number and extent of forest fires, the significant decline in the northern game populations, and the resulting dire impact all of this had on the Native population of the region.

Forest fires, which always seemed to accompany the arrival of non-Indians in the region and clearly intensified in the late 1920s and early 1930s, were a se-

rious problem. More than trees were lost in these vast northern fires. Without question, the first to suffer in this era of new northern interest and exploitation was the region's aboriginal population. In 1930 fire on a scale not previously experienced in northern Saskatchewan laid waste to vast sections of the boreal forest. In 1930, the worst fire year on record, thousands of acres of northern forest were destroyed. An especially dry spring fostered the blazes.[10] In the northern extension of the parkland grassfires, it appeared that prospectors, anxious to evaluate the mineral potential of northern Saskatchewan, found the northern forests and heavy underbrush problematic. Travel by any means other than boat or canoe was nearly impossible, especially in the late spring and summer months. In a short time the prospectors demonstrated the easiest way to remove this unwanted obstacle—the northern forest and underbrush—was to simply burn it off. This is precisely what prospectors did to significant sections of Saskatchewan's northern regions in the late 1920s and 1930s, especially the region in a broad triangle between the upper Geikie River, Lake Athabasca, and Reindeer Lake well north of the Churchill River. These were not small, contained, or focused fires, limited to careless smoking activities, a random lightning strike, or a runaway campfire; rather they were extensive multiple blazes specifically intended to lay waste to the forest so that an assessment of the area's mineral potential could be made more easily. For the prospectors, it was an extremely efficient means of clearing the forest and dense bush. With little soil covering the Precambrian shield, the fires quickly crowned and swept through the forest, leaving behind little more than a slowly cooling, burned-over area filled with deadfalls or charred standing sticks.[11] Delayed or subsequent flare-ups were rare, and the fires left behind a barren and, at least from the prospector's point of view, safe and easily accessible landscape. Fire was the perfect tool, or so the prospectors thought. At the same time it was a shortsighted method of clearing the bush because these multiple burns were often so much larger than their natural equivalent—fires started by lightning strikes. Even recreational fires started by a discarded cigarette or runaway campfire were not nearly as problematic because they were singular ignition points, usually near water, either on an island or exposed point.

By contrast, the fires set by prospectors were started at specific timed intervals at several points, usually along a traditional travel route such as a river system or chain of lakes. The prospectors relied on the prevailing winds to spread the multiple fires over as large an area as possible. Further, the combined geography and hydrography made the area north of the Churchill River particularly susceptible to this type of serial burning. Left behind from the last glacial retreats more than ten thousand years ago, most of the lakes and rivers in the shield country between Cree and Reindeer Lakes connect to the Churchill River—the main east-west transportation route across the northern half of the

province—and lie on a diagonal extending from southwest to northeast. Several individual fires set along the Churchill River would benefit from the relative absence of natural firebreaks as they were pushed north and west between the lakes by prevailing winds, especially during periods of dry summer weather in northern Saskatchewan.[12]

However unbelievable or unacceptable by today's standards, such burning was a fairly common practice in the late nineteenth and early twentieth centuries whenever and wherever prospectors were confronted with dense forests or thick undergrowth. Examples from other regions demonstrate that prospectors regularly engaged in the wholesale burning of forests in search of surface mineral deposits or evidence that subsurface deposits were nearby. In the late nineteenth century Colorado's prospectors burned vast tracts of the Colorado Front Range while evaluating the area for mining potential. On more than one occasion, these Front Range fires destroyed nearby towns in a pattern not dissimilar from the Saskatchewan story.[13]Also as in Saskatchewan, the incidence and severity of fires in Colorado increased dramatically along with newcomer activity related to prospecting and mining interests. On average in the presettlement era, fires in the Colorado Front Range occurred about every thirty-two years. The average interval between fires dropped to a mere eight years after the arrival of mining interests, according to a study of the Colorado Front Range.[14] While fire as a naturally occurring phenomenon is an important part of forest ecosystems, the frequency and severity of these intentionally set fires modified the flora and fauna of the northern forest in ways the prospectors either could not foresee or were not concerned about.[15]

The fires set by prospectors had an immediate, obvious, and devastating impact on the aboriginal population of northern Saskatchewan, and Indian agents in the area were quick to identify the problem. In 1928 Indian agent J. W. Waddy noted that while the Indians in the north were otherwise "fairly well off . . . prospects for the winter's fur catch are not too bright as prospectors appear determined to burn off the entire country."[16] He continued that "[the prospectors] have stripped a 250-mile district and the fires were going strong when we came through."[17] The agent was just returning from a trip along the Churchill River between the Reindeer River to Île à la Crosse, and the strip of fire he described, actively spreading north even as he made his way through the country, would have made the night sky glow red for weeks along most of the Churchill River route. What made the situation worse in this case was that July and August were particularly dry months that year. In fact, between June and September, months when the normal average monthly precipitation in the region described by Waddy was nearly ninety millimeters, the 1928 precipitation data for June, July, and August recorded monthly averages of less than thirty-five millimeters. It was a hot, dry summer.[18] Carried by the

prevailing winds in 1928, the taste and smell of smoke from the fires Waddy described were apparent for hundreds of miles, easily as far away as Manitoba and the Northwest Territories.

While the 1928 series of fires described by Waddy was a singular event occurring in one fire season, the pattern it suggested was indicative of a rapidly growing practice in northern Saskatchewan. Whenever newcomers arrived in the region, a dramatic increase in the instance and extent of forest fires followed very soon thereafter. The main and most immediate impact of these fires, of course, was habitat destruction in an area well-known, at least by the aboriginal population of the north, for its wealth of game. It was the very place that Waddy saw burning—the confluence of the Churchill and Reindeer Rivers and regions to the west along the Churchill River—that the Cree referred to as *kah kistak,* or "the area that is rich for game."[19] It would soon become, and remain for nearly a decade, an area that was largely devoid of game as a result of the destructive, selfish, and shortsighted pattern of burning. With time, usually a season or so, the burns would regenerate into a lush, thick undergrowth. If the prospecting interests returned to a particular region, however, the area would again be burned, often repeatedly for several years. It was this pattern—frequency combined with the extent of the burns—that became a major factor in detrimentally changing the northern ecosystem in terms of wild game patterns and aboriginal people.

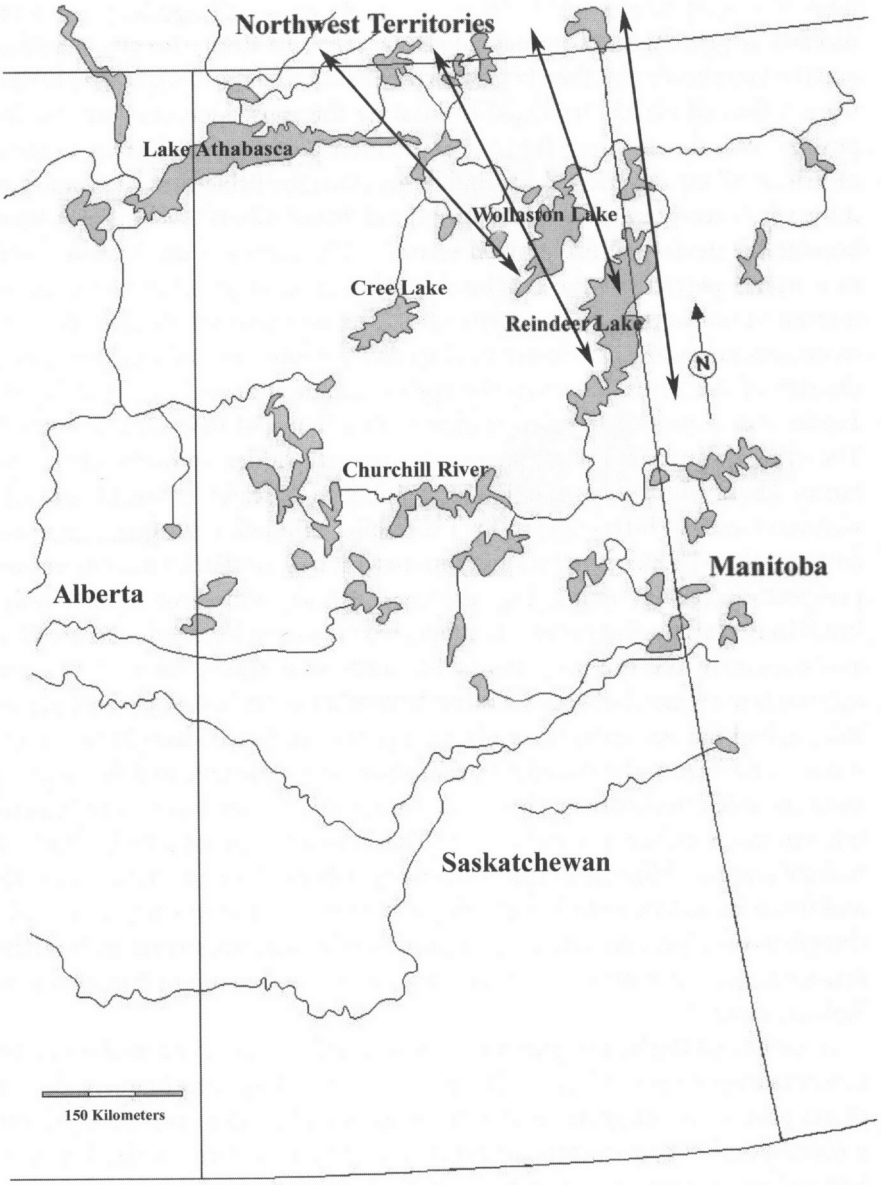
Fires, and the destruction of habitat they caused, continued throughout the 1920s with disastrous consequences for the northern game population and all who relied on those animals for subsistence. The barren ground caribou frequented much of northern Saskatchewan and occasionally wintered in areas as far south as the Churchill River (see Map 1). Their fairly regular migration patterns made them a predictable, reliable, and important staple, especially for the Denesuliné in the area north of Cree Lake between the eastern end of Lake Athabasca and Wollaston and Reindeer Lakes. Quite predictably, at least more often than not, each fall large herds of caribou, often tens of thousands of animals at a time, moved through the region between Lake Athabasca and Wollaston Lake while on their southward trek from their summer foraging grounds in the Northwest Territories. Then, each spring, almost as predictably, they would return via similar routes to their calving grounds around Beverly Lake. In some years local residents in the region between Lake Athabasca and Reindeer Lake remembered that upwards of 500,000 animals would move through, "a continual mass of bodies and legs passing for days and nights."[20] The caribou were hunted in the Northwest Territories during the summer, and their migration was an extremely important event in each year's cycle of subsistence activities. The Denesuliné would wait for their arrival each

Map 1. The original range of woodland and barren ground caribou once extended into the area just south of the Churchill River. The shaded area depicts that original range. (Map by Anthony G. Gulig, adapted from Fung, *Atlas of Saskatchewan,* 141)

year and hunt them as they passed through the district in the fall and spring (see Map 2). The caribou also provided meat through the winter because they were hunted in their southern winter range among the stunted jack pine and spruce forests of northern and northeastern Saskatchewan and northwestern Manitoba. Like the relationship between bison and Native people of the Great Plains, the caribou shaped much of the physical and cultural existence of the Denesuliné in this particular region.

When the caribou's migration route and winter range was burned over several times during the late 1920s and 1930s, the result was a fairly dramatic eastward shift in their traditional migration pattern.[21] Very soon after the arrival of prospectors and the devastation caused by the fires they used to clear the country, the caribou disappeared from their usual migration routes in northeastern Saskatchewan, leaving behind, as one recent newcomer to the north described, "a grim lifeless desolation."[22] While specific caribou migration patterns changed from time to time, and often from year to year, the larger patterns or regions used by the animals in their cyclical travel remained relatively constant over time, at least until the late 1930s. Until the 1920s and 1930s the caribou had navigated their way through periodic burns and continued to winter in the region between Reindeer Lake and Lake Athabasca, but the influx of newcomers in general, and mining interests in particular, changed all that in just a few short years. The period between the two world wars witnessed a dramatic growth of newcomer interest in northern Saskatchewan. As early as 1919 regular, reliable reports of mineral discoveries in the north were common stories in southern newspapers. "Northern Saskatchewan and Manitoba are on the eve of great development," the *Regina Leader* told readers in 1919.[23] Within months, the north was "swarming with men who [were] feverishly endeavoring to recover treasure from the earth." Almost simultaneously, a huge fire swept through the same area frequented by prospectors. Trap lines were devastated, thousands of acres of timber were lost, and serious environmental changes were under way in northern Saskatchewan.[24] The 1919 fire was said by northern Natives—those who knew the region best—to have been the largest and most extensive on record to that point. Whether or not it was in fact the largest to that point in modern memory, it nonetheless devastated the northwestern portion of the forest and shield country.[25] More importantly, in the years to come several fire seasons would top the real or imagined record set in 1919.

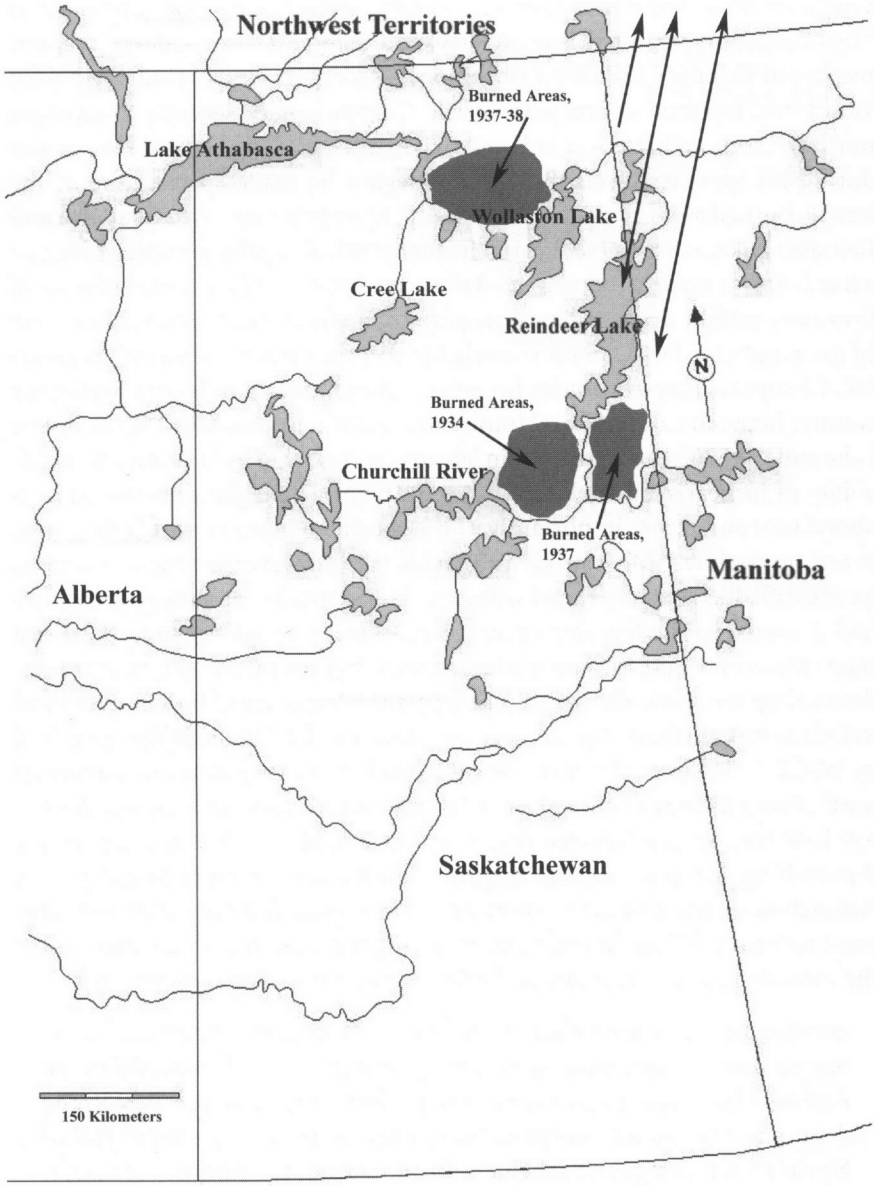
While rumors of gold and other valuable minerals always drew people to the area, during the 1930s another force drove newcomers to northern Saskatchewan. As the economic and environmental disaster of the Great Depression ruined hopes and fortunes, the flood of newcomers increased, spurred on



Map 2. Before the substantial burns of the 1930s, barren ground caribou frequently migrated between the Northwest Territories, northeastern Saskatchewan, and northwestern Manitoba on a diagonal route between Lake Athabasca and Wollaston Lake. The arrows approximate those migration routes. (Map by Anthony G. Gulig, adapted from Kelsall, *Migratory Barren-Ground Caribou*)

no doubt by repeated reports of new mineral finds in northern Saskatchewan. As early as 1930 regular commercial air service to La Ronge became a reality, and the same year more than twenty aircrews surveyed northern Saskatchewan from a fleet of planes dedicated to locating the most lucrative mineral deposits.[26] Very shortly thereafter, and by no mere coincidence, the region north of Prince Albert experienced several large, uncontrollable fires. It seemed as if the whole territory between La Ronge and Prince Albert was on fire in what became the new worst fire year on record.[27] The push was on, however, and in a nearly perfect inverse relationship, the Great Depression worsened as interest in northern mining activity grew. The northern forests and lakes became Saskatchewan's not-so-secret elixir to the economic and environmental disaster of the 1930s. Through the spring and summer of 1935, the *Regina Leader-Post* constantly regaled readers with a litany of new mineral finds.[28] The draw was irresistible for many from poverty-ridden southern cities and farms. Those who ventured north were doing so in search of wealth and adventure; they had little concern for the fragile, although unforgiving, natural environment. They soon struck out into new, at least until then unexplored by prospectors, regions employing airplanes, canoes, and most destructively, fire.[29] In 1935 alone, forty federally supported crews headed north to search for and document the ore potential of Saskatchewan's shield country. In their sights was the region between Reindeer Lake and Lake Athabasca, where placer mining had not yet given way to larger operations.[30] Fire was quickly recognized, at least from the outsider's perspective, as an effective tool for clearing away the thick underbrush, shrinking northern jack pine forest, and limited but tenacious lichen groundcover.[31] This was all supposed to be part of Saskatchewan's "Mineral Future"—crafting a better balance between north and south in Saskatchewan's stumbling economy in the interwar period.[32] Although it was a lucrative venture for many, the rise of northern mining brought serious environmental change and ecological destruction to much of northern Saskatchewan.[33]

It seems that the barren ground caribou specifically avoid burned over and regenerating jack pine forests.[34] The impact of these large and frequent fires, a direct product of the growing mining industry and amateur prospectors, was a sudden and lasting shift in the caribou migration patterns in northeastern Saskatchewan. This change in the migration route took the animals further east and out of reach of the Denesuliné populations around the area east of Lake Athabasca, Wollaston Lake, and the western side of Reindeer Lake (see Map 3).[35] It would be more than a decade before the caribou migration pattern shifted westward within reach of the Hatchet Lake band, who at the time spent a significant part of each year at Wollaston Lake.[36] Growing rumors of the fires and the direct relationship between the fires and prospectors sent Royal

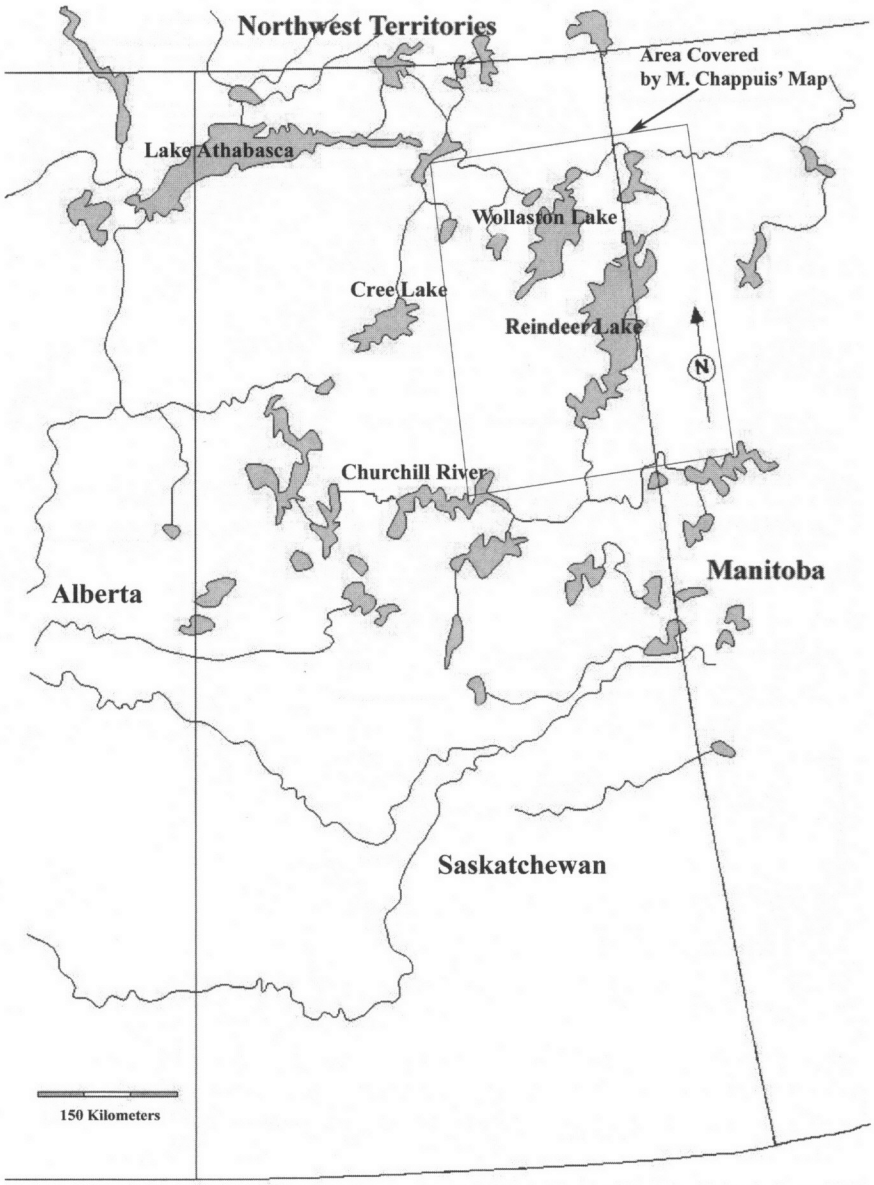


Map 3. Three large contiguous areas were burned off by mineral prospectors in the 1930s. The shaded areas approximate those burns and the arrows indicate the affected barren ground caribou migration routes following those burns. Compare these routes with those described in Map 2. Following the 1937–38 burns between Wollaston Lake and Lake Athabasca, it was more than ten years before the caribou returned to the region. (Map by Anthony G. Gulig)

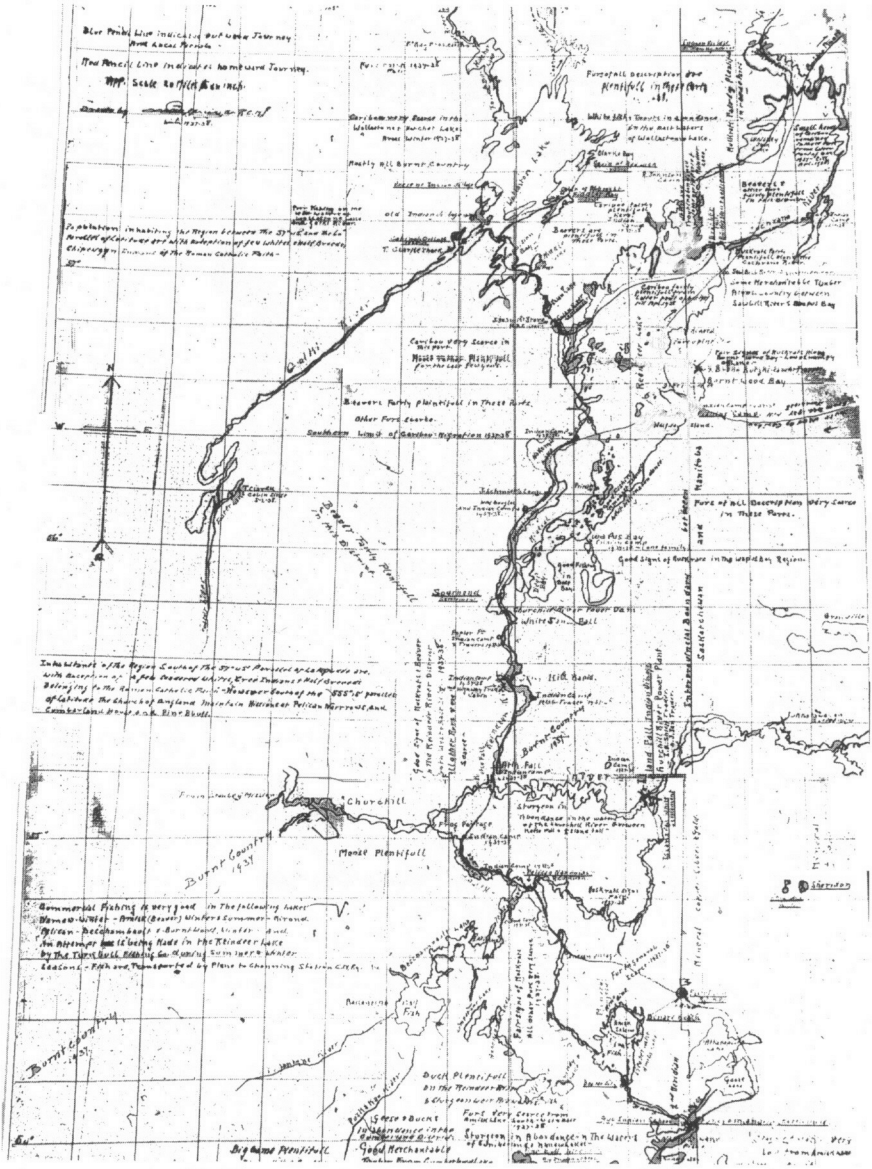
Canadian Mounted Police (RCMP) constable Marcel Chappuis, stationed at Fond du Lac in 1937, into the region between Lake Athabasca and the southern reaches of Reindeer Lake for a closer look. His report clearly confirmed what Waddy had reported several years earlier. Chappuis made several patrols of the north throughout his tenure at Fond du Lac and later Cumberland House, and during his 1937–38 travels through the region he made special note of the heavily burned areas along the Fond du Lac River between Lake Athabasca and Reindeer Lake, as well as the region further south along the Reindeer River. In a hand-drawn map, he documented the exact location of the more substantial fires and carefully described local geography and fur, fish, and game stocks (see Maps 4 and 5).[37] Drawn with remarkable accuracy and great attention to detail, Chappuis's map chronicles his nearly seven hundred miles of travel in the country between Cumberland House and the northern reaches of the Reindeer Lake and Lake Athabasca regions in late 1937 and early 1938. He noted the availability of furbearers, as well as the specific areas where game species were in abundance and, more importantly, those specific regions in which they were in serious decline.[38] Most striking about his map, however, are the vast regions he identified as "mostly burnt country."[39] Specifically, he noted where fires had occurred in the few years prior to his travel through the area. Two vast tracts south and west of Stanley Mission were burned off in 1934. In 1937 hundreds of square miles were again burned at the confluence of the Churchill and Reindeer Rivers (this is the same region devastated by the 1928 fire described by Waddy). However, the most critical burns in the late 1930s occurred further north. From the description given in his 1938 map, a huge area west of Wollaston Lake was burned between 1934 and 1937 (see Map 6).[40] It was among the diminishing jack pine and black spruce forests in the northernmost part of Saskatchewan, the very place where huge burns preceded the caribou's southward trek each fall for several years in a row, that newcomer activities caused the most damage to the local subsistence economy. Chappuis noted that

> woodland caribou are rather scarce in the whole district patrolled, [and] Barren land Caribou were, during the past season, not so plentiful in the Reindeer lake areas as on previous years, but were more plentiful in the district laying east and north of the Cochrane River to the south end of Nueltin Lake along the Cashemere River. During the summer of 1937, it was reported at Nueltin Lake Post, that caribou were very plentiful. These big game seem to remain in these areas during breeding time.[41]

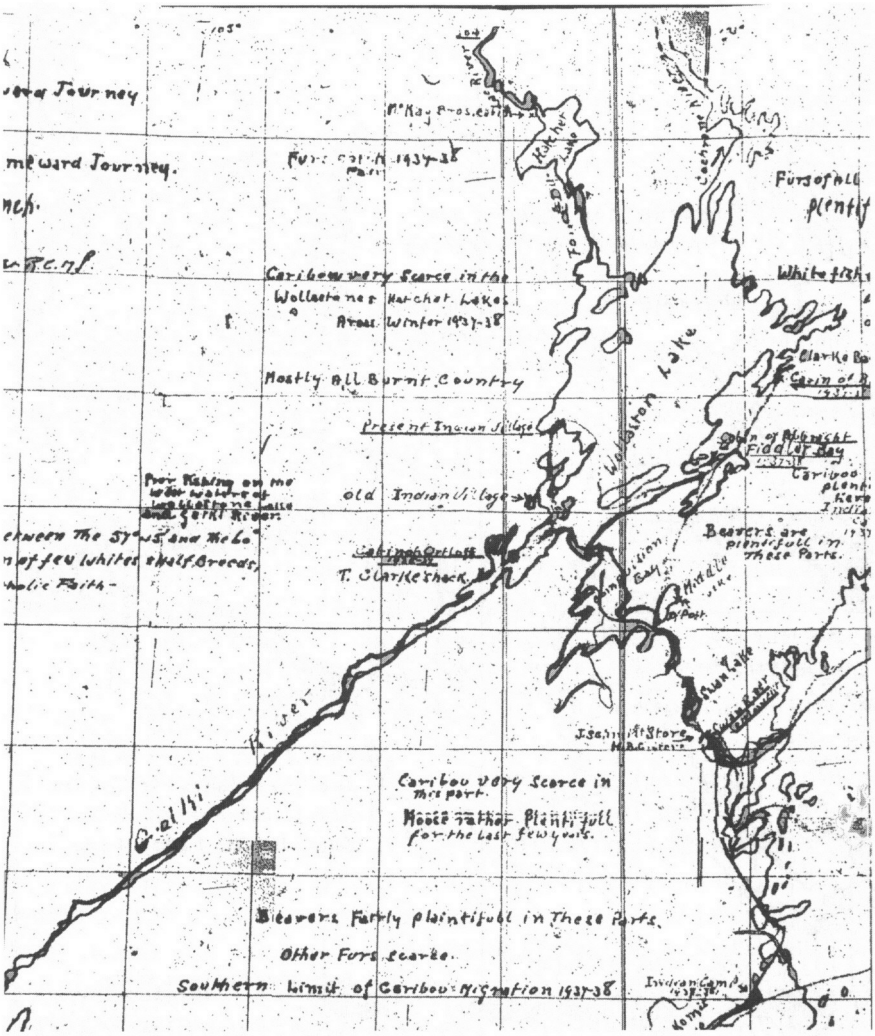
Chappuis was actually watching the migration route shift to the east, away from the Denesuliné settlements along the east end of Lake Athabasca and Wollaston and Reindeer Lakes (see Map 7).[42] The resulting impact of these



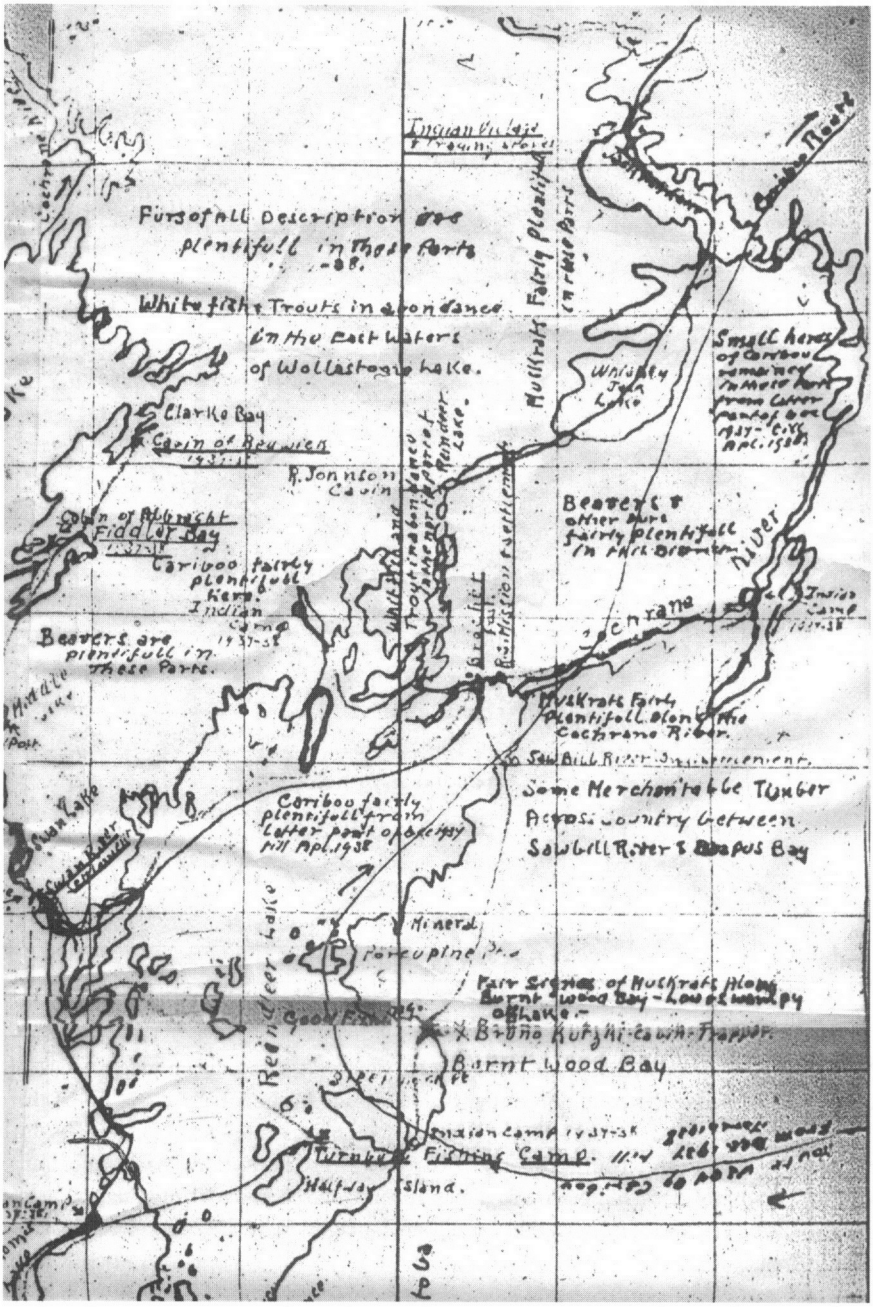
Map 4. The area of inset shows the region described by RCMP Constable Marcel Chappuis in his 1938 hand-drawn map. (Map by Anthony G. Gulig)



Map 5. In June of 1938 RCMP Constable Marcel Chappuis produced this hand-drawn map of the region around Reindeer and Wollaston Lakes. His map identifies several important changes to the region, especially the recent burns caused by prospectors and the absence of caribou between Wollaston Lake and Lake Athabasca (Map courtesy of the National Archives of Canada, NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938)



Map 6. Among the many notations on Constable Chappuis' hand-drawn map are several comments regarding the condition of the region around Wollaston Lake. He noted that "Caribou are very scarce in the Wollaston-Hatchet Lake areas, winter, 1937–38. This was due to the area being mostly all burnt country." (Map courtesy of the National Archives of Canada, NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938)



Map 7. Constable Chappuis also identified the new migration route for the barren ground caribou in his map. Following the large fires of the 1930s, the caribou followed a more easterly route north of Reindeer Lake and along the Cochrane River. Not until the early 1950s, and then in rapidly declining numbers, did the barren ground caribou return to the region between Lake Athabasca and Wollaston Lake. (Map courtesy of the National Archives of Canada, NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas)

near wholesale and immediate shifts would be devastating on the Native inhabitants of the region. Chappuis continued:

> Contrary to the usual route taken by the caribou, on previous years when the Game used to follow the straight route from the north to the south via Cashemere Lake and Fort Hall, reaching Reindeer Lake, near Brochet Settlement, this last season the route taken was via Red River, as per usual, but from that point took a southeasterly direction towards Fort Churchill, then east reaching Reindeer Lake at about Burntwood Bay, in December 1937, instead of the early part of November as in other years. At the latter named point, caribou herds spread in all directions, although mostly on the east shore of Reindeer Lake and areas east of the lake. . . . Contrary to previous years, caribou were very scarce in the Wollastone [*sic*] lake region. This is no doubt due to the country having been all burnt over.[43]

Trapped between Lake Athabasca to the west and a large burned over region of forest blocking their southward trek, the caribou migration route shifted further east each year during the late 1930s. Historically, the Denesuliné had taken the moderate shifts in annual migrations in stride, shifting their cyclical patterns accordingly. But as a direct result of the fires, the acreage burned, and the extended time it takes for the slow-growing northern forest and lichen ecosystems to regenerate, devastating and lasting shifts in the migration occurred. The location and expanse of the fires identified by Chappuis in 1937–38 makes it certain that they were set along the Fond du Lac River, the main transportation route between Lake Athabasca and Wollaston and Reindeer Lakes. Additionally a ribbon of fire exploded from all along the Fond du Lac River, igniting some of the northernmost stands of jack pine and black spruce in Saskatchewan. The pattern was identical to that identified by Waddy along the Churchill River in 1928. This time, however, the fires destroyed a corridor of forest though which, at least until that time, the caribou frequently traveled. On their trek north in the spring of 1938, the caribou headed north and east of Reindeer Lake. It would be more than a decade before the caribou again crossed the Fond du Lac River between Lake Athabasca and Wollaston Lake.

Fires on the southern fringe of the boreal forest, like the area west of Wollaston Lake, changed the region such that certain species of flora, specifically the ground lichens on which the caribou depended for food from fall through spring, might not fully regenerate for several decades.[44] While moose and many other furbearers quickly return to recently burned over areas in search of the lush, new, green brush erupting from the ashes, the Denesuliné could not simply shift their cyclical patterns of existence and expect these species to fill the void left by the caribou. Moose and caribou exhibit entirely different patterns and present vastly different hunting challenges. Caribou are herding

animals and are predictable at different times of the year—specifically during their annual migrations. The moose, on the other hand, do not yard up or migrate but instead are fairly nomadic in the boreal forest. Moose hunting is a very time-intensive activity, involving skilled stalking, tracking, and calling, and they are often hunted from September through March. By comparison, caribou are only hunted occasionally by the same method—in the depth of winter as they peruse the forest for food and shelter from the wind and cold. Only then does the hunt rely on intensive stalking or tracking. Traditionally, the most successful and productive hunting method used by the Denesuliné was "ambush hunts"—short, intense bursts of activity that occurred twice a year at very precise times along relatively predictable migration routes.[45] The caribou and moose hunts remained two entirely different events, and while moose meat was certainly part of the Denesuliné diet, the moose remained only a small part of the food supply for people in the region.[46]

While the "caribou crisis" of the 1950s and 1960s—a rapid decline in the caribou herds in the Northwest Territories as well as the provincial northern regions of Saskatchewan and Manitoba—was identified and studied by trained biologists and other scientists much later, little attention has been paid to this more acute situation in northern Saskatchewan nearly two decades earlier.[47] Change was certainly a constant in Saskatchewan's provincial north during the late nineteenth and twentieth centuries. The arrival of missionaries, treaty commissioners, commercial fishermen, and non-Native trappers and the extension of the fur trade through the Hudson Bay Company and Revillion Frères individually and collectively affected the lives and experiences of Native peoples in the region. However significant over time, much of this change occurred gradually over decades and, to greater or lesser degrees, Native people in the north generally adapted to such change. The environmental change brought about by the prospector- or newcomer-set fires used to clear the land, however, was dramatic and immediate, leaving little room for physical survival, let alone adaptation. The caribou, glaringly absent from northeastern Saskatchewan after 1937, were not merely a significant food source for the Denesuliné; they were the most significant and central food source in the region. The Denesuliné were, after all, the "Caribou Eaters."[48] Important changes had taken place in the years leading up to the serious burns—changes that exaggerated the crisis brought on by the shifting caribou migration patterns. With the advent of the fur trade in the Lake Athabasca country, those who once hunted the caribou almost exclusively in both winter and summer seasons shifted their cyclical patterns of existence to incorporate extensive trading activity and connected themselves to the traders and missionaries who were established in and near the growing settlements of Fond du Lac, Stony Rapids, and Black and Wollaston Lakes. The result was nearly immediate and included

an increased reliance on the annual caribou migration at precise times of the year in select locations. They waited for the caribou at regular times in regular places. So predictable and large were the historic migrations, and so identifiable the areas where the barren ground caribou wintered, Native hunters from as far away as Patuanak, hundreds of miles to the south along the Churchill River, ventured north to hunt them.[49] Without question, in the years when caribou did not appear, starvation and desolation followed.[50] RCMP reports clearly identified this pattern. In his 1929 report from the RCMP detachment at Stony Rapids in the northernmost region of Saskatchewan, corporal H. W. Stallworthy, like all who knew the people of the Fond du Lac area, identified the Denesuliné north and east of Lake Athabasca as the "Caribou Eaters." These were people for whom the caribou were absolutely central in annual hunting cycles.[51]

Not until the end of the 1930s did Saskatchewan authorities really consider the scope of the problems caused by the influx of newcomers in the north. The Northern Saskatchewan Conservation Board (NSCB), formed in 1939, instituted the first real examination of northern fur, fish, and game management in the region. While its purpose was "merely an advisory one," the makeup of the board suggested that the province was searching for new directions in resource management. Board membership was to include a "young" civil engineer and a "young qualified biologist." Indian interests were to be represented as well. One of the suggested appointments was an "Indian Agent for the whole of Northern Saskatchewan, having under his jurisdiction all Indians who subsist by trapping and hunting in Northern Saskatchewan, thus divorcing these Indians completely from the Indians living on reserves and subsisting by means of agriculture."[52] The NSCB went to work reviewing the state of northern affairs and two years after its first meeting issued a rather gloomy report. The board confirmed the obvious. Indian territory in northern Saskatchewan had "been greatly reduced by the opening up of the country for settlement on the southern limit of his range and by the influx of white trappers into his territory in the north. Mining, prospecting, and commercial fishing has also restricted his movements and the supply of wildlife for his needs."[53] Following the war, the provincial government commissioned further natural resource studies in northern Saskatchewan. The investigation discovered the full impact of recent resource development on Indians.[54]

Following the 1938 Treaty Ten annuity trip, Indian agent S. L. MacDonald forwarded Indian concerns about the recent decline in fur-bearing animals. Most of the complaints focused on the invasion of the region by non-Indian trappers. MacDonald dismissed the complaints, arguing that they were "just one Indian's word, with nothing to confirm it."[55] Even if MacDonald did not want to believe the Native people with whom he met, there was outside and by

then longstanding confirmation of the now dire condition of northern Saskatchewan. Less than a month later, Constable Chappuis forwarded Indian complaints of non-Indians over-trapping and hunting the north. "At Southend," wrote Chappuis, "informations were received that the entire population, Treaty Indians and half-breeds families, were living under very difficult circumstances."[56] The local Roman Catholic missionary, Father Egenold, also supported Chappuis's report, but he warned against relief operations to the area as it would "demoralize and spoil his people."[57] Perhaps more importantly, if unmentioned, was the fact that such governmental support would make the Indians less reliant on the church.

The Denesuliné were worried by not only the dramatic changes that took place in the north in the 1920s and 1930s but also by the way they were ignored when they spoke up about those changes. Even the NSCB, while recognizing the plight of Indians in the province, argued that they were, at best, "maintaining themselves." The board acknowledged that the Indians were "full of complaints" but argued that improved conditions were only possible if the Indians were taught how to conserve their own fur and game resources. The secondary theme, argued the NSCB, was the trouble caused by white trappers, even though the majority of them were "law abiding."[58] The NSCB was not the only office deaf to Indian concerns. Peter Pond band chief Alex Campbell frequently requested assistance from the Indian Department as conditions in the north worsened. When Campbell forwarded his requests for assistance or relief, all too often the local Indian agent at the time, J. P. B. Ostrander, simply refused to believe the story.[59] Although Ostrander conceded that conditions in the north were indeed worsening and that new, more restrictive laws and "the destruction of their wild meat supply" left Indians with few opportunities to sustain themselves, he continually refused to identify the encroaching white population or the vices they brought to the region as problematic. Instead he argued that the decline in game was due largely to wolves or bad hunting practices.[60] But the Denesuliné knew what was causing the problem—the increased rate and extent of forest fires in the north had a lasting and detrimental impact on the region.[61]

Sadly, Saskatchewan only realized these problems in hindsight, even though game officers and RCMP patrols continually lamented the growth of "wildfires" in the north. What caused the problem was the convergence of several key factors. While the provincial government had desperately sought to take control of northern resources since Saskatchewan was established in 1905, the transfer of natural resources from federal authority to provincial control did not become a reality until 1930. With the economic crisis of the Great Depression, the provincial government simply could not supply the infrastructure to monitor much of the newcomer activities in the northern part of the province. Lastly,

the ecological crisis of the drought during much of the 1930s turned northern Saskatchewan into a tinderbox just waiting for northern prospectors to light the fire. The convergence of new, financially strapped provincial resource managers after 1930, an economic crisis brought on by the Great Depression, a drought, and the substantial influx of newcomers unfamiliar with the cycles of existence in the north directly led to devastation and starvation for many of the region's aboriginal inhabitants. In a 1940 report the Saskatchewan Department of Natural Resources ominously noted that fire was "the single greatest agency on the destruction of wildlife, and impoverishment of the people" in the north.[62] Sadly, even though these sorts of "wildfires," set fires really, had been an obvious and increasing problem in the north since at least 1910 and had reached near inferno status in the 1920s and late 1930s, it was not until the post-war era that policy makers began to pay serious attention to the larger problems created by these large burns and the people who caused them.

NOTES

I thank Stephen Pyne as well as canoe partners and scholars Bill Waiser and the late John McConnell for their helpful comments on earlier drafts of this article.

1. John P. Kelsall, Edmund S. Telfer, and Thomas D. Wright, *The Effects of Fire on the Ecology of the Boreal Forest, with Particular Reference to the Canadian North: A Review and Selected Bibliography* (Edmonton: Canadian Wildlife Service, 1977), 11–12; Marie-Josée Fortin, Serge Payette, and Kim Marineau, "Spatial Vegetation Diversity Index along Postfire Succession Gradient in the Northern Boreal Forest," *Ecoscience* 6:2 (1999): 204–6; Serge Payette, Najat Bhiry, Ann Delwaide, and Martin Simard, "Origin of the Lichen Woodland at its Southern Range Limit in Eastern Canada: The Catastrophic Impact of Insect Defoliators and Fire on Spruce-Moss Forest," *Canadian Journal of Forest Resources* 30 (2000): 288–90; Miron Heinselman, "Fire in the Virgin Forest of the Boundary Waters Canoe Area, Minnesota," *Quaternary Research* 3 (1973): 329–32.

2. While much of the recent scholarship on "fire stick" history indicates that the use of fire in aboriginal communities was more widespread than previously thought, there is no evidence suggesting that fire was ever used in any substantial way as a forest or game management tool in the shield country of Canada's provincial north. It is likely that the fragile ecosystem, slow growing and slow to regenerate after fire, severely limited or rather eliminated the use of fire as a management tool. See generally Thomas Vale, ed., *Fire, Native People, and the Natural Landscape* (Washington DC: Island Press, 2002); and Matthew Boyd, "Identification of Anthropogenic Burning in the Paleoecological Record of the Northern Prairies: A New Approach," *Annals of the Association of American Geographers* 92:3 (2002): 471–87.

3. Henry T. Lewis, "Maskuta: The Ecology of Indian Fires in Northern Alberta,"

The Western Journal of Anthropology 7:1 (1977): 15–52; Henry T. Lewis, *A Time for Burning* (Edmonton: Boreal Institute for Northern Studies, 1982), 24–42; Nancy J. Turner, "A Time to Burn: Traditional Use of Fire to Enhance Resource Production by Aboriginal Peoples in British Columbia," in *Indians, Fire, and the Land in the Pacific Northwest,* ed. Robert Boyd (Corvallis: Oregon State University Press, 1999), 185–86.

4. "Forest Fire Causes Damage in the North," *Saskatoon StarPhoenix,* 13 May 1908, 1.

5. W. O. Kupsch and S. D. Hanson, eds., *Gold and Other Stories as Told to Berry Richards* (Regina: Saskatchewan Mining Association, 1986), 1. A gold rush of sorts visited the Lac la Ronge area as early as 1906.

6. Saskatchewan Archives Board [SAB], Records of the Attorney General [ATG] 4, Part C, folder 8, *Annual Report of the Fond du Lac Detachment of the Saskatchewan Provincial Police,* 1924, 9; Anthony G. Gulig, "Sizing Up the Catch: Native-Newcomer Resource Competition and the Early Years of Saskatchewan's Northern Commercial Fishery," *Saskatchewan History* 47:2 (fall 1995): 3–10; R. C. Macleod, "The RCMP and the Evolution of Provincial Policing," in *Police Powers in Canada: The Evolution and Practice of Authority,* ed. David Schneiderman and R. C. Macleod (Toronto: University of Toronto Press, 1994), 44–56.

7. A. L. Karras, *North to Cree Lake* (Toronto: Simon and Schuster, 1970; reprint, Don Mills, Ontario: PaperJacks, 1975), 10; P. G. Downes, *Sleeping Island: The Story of One Man's Travels in the Great Barren Lands of the Canadian North* (Toronto: Longman, Green, & Company, 1943; reprint, Saskatoon: Western Prairie Producer Books, 1988), 5; SAB, Department of Natural Resources [DNR], Field Reports, District Offices, Athabasca, T. C. Davis to S. T. Wood, 18 June 1935.

8. Kupsch and Hanson, *Gold and Other Stories,* 231–32, 250; Robert Bone, ed. *The Chipewyan of the Stony Rapids Region* (Saskatoon: Institute for Northern Studies, 1973), 16. While there are no exact data on the number of visitors or non-Indian residents in the region during this era, when the various transient non-Indian prospectors, trappers, commercial fishermen, loggers, and sportsmen are considered, the number must clearly be measured in the thousands by the 1930s.

9. Castell J. Hopkins, *The Canadian Review of Public Affairs* (Toronto: Annual Review Publishing Company, 1909), 19; Castell J. Hopkins, *The Canadian Review of Public Affairs* (Toronto: Annual Review Publishing Company, 1910), 370.

10. "Forest Fire Damage Third Highest since '30," *Saskatoon StarPhoenix,* 15 December 1967, 3; "Two Hundred Men Battle Forest Fire North of Prince Albert," *Regina Leader-Post,* 10 June 1930, 2.

11. J. H. Crawford and D. J. McRae, "The Ecological Role of Fire in Jackpine Forests," in *The Role of Fire in Northern Circumpolar Ecosystems,* ed. Ross W. Wein and David A. Maclean (New York: John Wiley & Sons, 1983), 190–91.

12. Ka-iu Fung, ed., *Atlas of Saskatchewan* (Saskatoon: University of Saskatchewan, 1999), 115, 124–25.

13. Thomas T. Veblen and Diane C. Lorenz, *The Colorado Front Range: A Century of Ecological Change* (Salt Lake City: University of Utah Press, 1991), 19.

14. David Goldblum and Thomas T. Veblen, "Fire History of a Ponderosa Pine/Douglas Fir Forest in the Colorado Front Range," *Physical Geography* 13 (1992): 139.

15. Heinselman, "Fire in the Virgin Forests," 329–82.

16. National Archives of Canada [NAC], Record Group [RG] 10, vol. 6756, file 420-11, pt. 2, J. W. Waddy, 25 August 1928.

17. Ibid.

18. Fung, *Atlas of Saskatchewan,* 103; Environment Canada, *Canada Daily Climate Data Temperature and Precipitation, Western Canada, 2000* [CD-ROM] (Ottawa: Environment Canada, 2000), precipitation data from Lac la Ronge, June–August 1928.

19. Ron Mirasty, testimony before the *Churchill River Board of Inquiry,* Southend, Saskatchewan, 22 January 1978, TMS [in possession of author], 6. Mirasty was specifically referring to the many muskeg swamps that occur in lower lying areas where water and land meet and where big game, smaller mammals, fish, and waterfowl abound.

20. NAC, RG 10, vol. 6756, file 420-11, pt. 3, Report of RCMP Constable M. Chappuis, 15 June 1938, 11.

21. NAC, RG 10, vol. 6756, file 420-11, pt. 3, Report of RCMP Constable M. Chappuis, 15 June 1938, 11.

22. Karras, *North to Cree Lake,* 210–11.

23. "Mining Prospects in Northern Portions of This Province Are Tremendous, Says Const. Ekman," *Regina Leader,* 29 November 1919, 13.

24. Ibid.

25. Clifford Dunfield, "Early Fur Trade Devastated by Forest Fire, White Men," *Saskatoon StarPhoenix,* 23 July 1966, 16.

26. "Prince Albert Becomes Base of Ore Search," *Regina Leader-Post,* 16 May 1930, 1.

27. "Two Hundred Men Battle Forest Fire North of Prince Albert," *Regina Leader-Post,* 10 June 1930, 2.

28. "New Gold Strike Made in Athabaska Lake Area," *Regina Leader-Post,* 4 April 1935, 1; "A Search for Gold in Saskatchewan," *Regina Leader-Post,* 23 April 1935, 4; "Mining Activity in Goldfields Area of Lake Athabasca," *Regina Leader-Post,* 3 January 1936, 3; "Complaint in Goldfields," *Regina Leader-Post,* 13 January 1936, 3; "Province Turns to Gold in North for Development," *Regina Leader-Post,* 6 February 1936, 1.

29. "Reginians Hunt Gold in Northern Field," *Regina Leader-Post,* 7 February 1936, 5.

30. *Regina Leader-Post,* 17 April 1935, 1; *Regina Leader-Post,* 14 November 1935, 2.

31. "Outstanding Development Forecast," *Regina Leader-Post,* 7 January 1937, 3.

32. "Our Mineral Future," *Regina Leader-Post,* 8 January 1937, 4.

33. "Province's Production of Gold in 1937, Shows ⅓ Increase," *Regina Leader-Post,* 6 February 1939, 11. Gold production in 1937 posted a one-third increase over the previous year. The goldfields near Lake Athabasca provided much of this increase.

34. Saskatchewan Environment and Resource Management [SERM], *Saskatchewan State of the Environment Report* (Regina: SERM, 1995), 30; John P. Kelsall, *The Migratory Barren-Ground Caribou of Canada* (Ottawa: Canadian Wildlife Service, 1968), 263.

35. NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of Constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938.

36. NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of Constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938. The first mention of the return of the caribou can be found in Farley Mowat's *The People of the Deer* (Boston: Little, Brown, & Company, 1952). While written in the postwar period, Mowat identifies the significance of the caribou in the region along the Cochrane River and as far west as Wollaston Lake.

37. NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of Constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938.

38. NAC, RG 10, vol. 6756, file 420-11, pt. 3, Report of RCMP Constable M. Chappuis, 15 June 1938.

39. NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of Constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938.

40. Ibid.

41. NAC, RG 10, vol. 6756, file 420-11, pt. 3, Report of RCMP Constable M. Chappuis, 15 June 1938.

42. NAC, RG 10, vol. 6756, file 420-11, pt. 4, map appended to [Report of Constable M. Chappuis regarding his] Patrol from Cumberland Detachment to Lac du Brochet Areas and Return, 15 June 1938.

43. Ibid.

44. Peter Kuhry, "The Role of Fire in the Development of Sphagnum-Dominated Peatlands in Western Boreal Canada," *Journal of Ecology* 82 (1994): 909.

45. Ludger Müller-Wille, "Caribou Never Die: Modern Caribou Hunting Economy of the Dené (Chipewyan) of Fond du Lac, Saskatchewan and NWT," *Musk-Ox* 14 (1974): 13–14.

46. Takashi Irimoto, "The Chipewyan Hunting System," *Arctic Anthropology* 18 (1981): 44–46.

47. Peter Clancy, "Native Hunters and the State: The 'Caribou Crisis' in the Northwest Territories," *Studies in National and International Development Occasional Paper No. 87–101* (Queen's University: Programme of Studies in National and International Development, 1987); "Annual Migration Under Way," *Regina Leader-Post,* 22 December 1950, 2; "Big Caribou Herds Pressing Southward Near Flin Flon," *Regina Leader-Post,* 8 January 1951; "Caribou Gathering for Trek," *Regina Leader-Post,* 1 November 1957, 5.

48. J. G. E. Smith, "The Chipewyan Hunting Group in a Village Context," *Western Canadian Journal of Anthropology* 2 (1970): 60–61; Pierre Duchaussois, *Mid Snow and Ice: The Apostles of the North-West* (Buffalo: Missionary OMI, 1937), 195–216; Beryl C.

Gillespie, "Changes in Territory and Technology of the Chipewyan," *Arctic Anthropology* 13 (1976): 8; J. C. Yerbury, "The Post-Contact Chipewyan: Trade Rivalries and Changing Boundaries," *Ethnohistory* 23 (1976): 237–45.

49. Robert Jarvenpa, "Spatial and Ecological Factors in the Annual Economic Cycle of the English River Chipewyan," *Arctic Anthropology* 13 (1976): 56–59.

50. Duchaussois, *Mid Snow and Ice,* 197.

51. NAC, RG 23, vol. 1003, file 721-4-37, pt. 41, H. W. Stallworthy to RCMP "G" Division, Edmonton, Alberta, 1 October 1929; Gulig, "Sizing Up the Catch," 5.

52. NAC, RG 10, vol. 6756, file 420-11, pt. 3, Report of RCMP Constable M. Chappuis, 15 June 1938; NAC, RG 10, vol. 6756, file 420-11, pt. 3, W. F. Kerr to T. A. Crerar, 21 December 1938.

53. SAB, DNR, file 215, [Report of the] Department of Northern Conservation, 1939–1941.

54. See David Quiring, "Battling Parish Priests, Bootleggers, and Fur Sharks: CCF Colonialism in Northern Saskatchewan" (Ph.D. diss., University of Saskatchewan, 2002).

55. NAC, RG 10, vol. 6756, file 420-11, pt. 4, 1938 Annuity—Treaty Ten Trip, S. L. MacDonald, 5 July 1938.

56. NAC, RG 10, vol. 6756, file 420-11, pt. 4, 1938 Annuity—Treaty Ten Trip, S. L. MacDonald, 5 July 1938; NAC, RG 10, vol. 6756, file 420-11, pt. 3, RCMP Report of a "Patrol from Cumberland House Detachment to Lac du Brochet Areas and Return," M. Chappuis, 15 June 1938, 4.

57. NAC, RG 10, vol. 6756, file 420-11, pt. 3, RCMP Report of a "Patrol from Cumberland House Detachment to Lac du Brochet Areas and Return," M. Chappuis, 15 June 1938, 6.

58. SAB, DNR, file 215, Deputy Minister of Northern Conservation, 24.

59. NAC, RG 10, vol. 8864, file 1/18-11-11, pt. 1, "Report on the Battleford Agency for the Month of December, 1944," J. P. B. Ostrander, n.d.

60. NAC, RG 10, vol. 8864, file 1/18-11-11, pt. 1, "Report on Battleford Indian Agency for the Month of October, 1944," J. P. B. Ostrander, n.d.; George Colpits, *Game in the Garden: A Human History of Wildlife in Western Canada to 1940* (Vancouver: University of British Columbia Press, 2002), 90–91.

61. Manitoba, Legislative Assembly, Debates and Proceedings, 14 May 1998, retrieved 17 April 2003 from *http://www.gov.mb.ca/leg-asmb/hansard/4th-36th/vol_048b/h048b_11.html.*

62. SAB, Natural Resources [NR] ½ file 215, Department of Natural Resources, Deputy Minister, Northern Conservation, *Report and Estimate of Cost for Plan to Increase the Resources of the Districts of Cumberland and Athabasca, 1939–1940,* 21.