

## Potato Snows\*

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In the year of the American bicentennial, I moved to northern Maine. Sometimes that fact comes up in conversation, and people who know the state ask if I lived in Presque Isle, or maybe Caribou. It's still satisfying to say no, I lived up by Fort Kent. People who know Maine gasp, because Fort Kent sits at the edge of the American map, at the very northern cap of the state. My house was seven miles south of Fort Kent, and it stood high enough on a hill that I could see across those seven miles, see the pall of smoke from Fort Kent's wood stoves in winter, see the hills of Canada beyond.

The house had been built just after the Civil War, but there was nothing fancy about it, nothing of the New England classicism that is common farther south. With a square footprint and two stories under a peaked roof, it had been sided sometime around 1950 with a then-popular asbestos tile, light green and brittle. The tile was no longer available, and several pieces had broken over the years, revealing shiny foil that was left uncovered.

On the west side of the house was an unheated sun porch. It had been built two generations earlier for a tubercular child who had not survived; in summer it was often unpleasantly warm, and in winter it was so cold that we used it only as a place to pile coats and boots. There was another lean-to on the north side. It had been added at about the same time for a kitchen and a bath, the first plumbed rooms in the structure. This northern addition was insulated and heated, but it didn't have a proper foundation. It sat on poles resting on massive slabs of slate, and the floors tilted so much that if you spilled a glass of water, you couldn't clean it up before the water ran straight to the baseboards.

Still, the house was wonderful. The green tile and silver foil covered old shingles, and the shingles covered four-by-ten planks. The planks were stacked on their thin sides, and they had been dovetailed and pegged together into amazingly solid walls. You couldn't see the planks -- they were covered up -- but if you slammed the solid front door a tiny tremor ran through the house, the whole structure responding as a rigid mass.

The house no longer exists. It was knocked down and burned in the late 1980s, after we had left Maine. People who were there say that when the bulldozer first rammed the house nothing happened. When the bulldozer came again, harder, the whole original house--four rooms square, upper and lower-- moved off its boulder foundations and only then, teetering over the cellar, began to come apart.

I had rented this house from a farmer named Orenie. His great-great-grandfather had built it, and Orenie himself would never have moved out. But after raising half a dozen children in it, his wife Elsie decided that she wanted a house of her own--wanted nothing more to do with this house of her husband's family. No hard feelings, at least toward Orenie: the house just reminded her of too many years spent with a mother-in-law. And so Orenie and their four sons built a new house a hundred yards up the road. The new house was well-built and much more comfortable than the old one: I think, as I say that, of getting into a hot bath in winter and reaching out a finger to touch the thick ice that had built up around the corners of the panes in the bathroom window. But the new house had been built to plans that might have come from the catalog store in town, and even though it was built of lumber sawn from logs cut on the surrounding hills, it looked like a million suburban homes. I was glad that it was blocked from my sight by a very large barn approximately as old as our house. The barn was covered with a homely siding the color of peppered straw. I liked its plainness, which masked hand-sawn timbers.

A few weeks before arriving for the first time in Fort Kent, I had been living, jobless, on the edge of Washington State's Olympic Peninsula. (The counselor at the Port Angeles unemployment-insurance office told me that he didn't have a lot of openings for geographers.) Margaret and I had stopped at the tiny Carlsborg post office on our way to picking berries, and she had broken into tears when she saw the mailgram that had come for me, offering a job in Fort Kent. We had only been in Washington a month, and another move--the last was from Southern California--was the last thing she wanted.

A few days later I began driving a loaded rental van across the country. I crossed the blistering heat of the Columbia Basin. I went through the North Dakota badlands. At Sault Ste. Marie I crossed into Canada for the run down to Ottawa and Quebec City. Oddly enough--it came as a surprise to me, at any rate--the first French I saw came long before Quebec; it was somewhere in western Ontario. There was a blocked-up van, something like a decommissioned hokey-pokey wagon, and on it there was a sign that advertised French fries. I remember thinking how excellent they were, thicker than the American standard, like honest pieces of potato. I didn't think at the time how appropriate an introduction they were to Fort Kent.

I came down to Quebec City and the inlet of the St. Lawrence, too broad to see across. Everything was French now, including, of course, the names of the places I passed: La Pocatière, Kamouraska, and Rivière-du-Loup, the town where I left the St. Lawrence. The Trans-Canada Highway here crosses the low but broad summit of the Appalachians; it comes down past the great Lake Temiscouata, which empties into the St. John River at Edmonston.

This was New Brunswick. Despite the English name the language of the northern half of the province remains overwhelmingly French. Edmonston was

the big town I came to, but despite its name French is the language spoken in it, as well as in nearby St. Basile and Ste.-Anne-de-Madawaska. The same thing is nearly true on the American side of the St. John. Twenty miles upstream from Edmonston is Fort Kent, soberly Britannic. Next door are Frenchville and Ste. Agathe; farther downstream are Notre Dame and Lille. In all of them, including Fort Kent, one hears more French than English.

Sitting at the counter of the coffee shop attached to Fort Kent's one motel, almost the only word I recognized was the occasional "toast." I was puzzled, but even fluent French speakers are baffled, at least for a while, by the Acadian dialect spoken in the St. John Valley.

I was house hunting and growing discouraged when, after several days, I heard that an old farmhouse was for rent seven miles south of town, I drove out in my loaded van. I had been given instructions about going to the new house where, I was told, the owners lived. Now I worried that conversation might be impossible.

Elsie answered: she was short, shy, friendly. I remember best her nervous energy, a trace of the not altogether healthy nervousness so common among women in the St. John Valley, who traditionally spend their lives cooped-up during the long, long winters.

Her English had a slight French accent, but Elsie had gone to an English-language high school, so we had no difficulty understanding each other. The old house was for rent, she said, but her husband was out. She would speak to him in the evening; I could return the next day. That was it. The next day I knocked at the door. Orenie answered. He was maybe an inch below six feet, round-faced and round-shouldered: a powerful man but without the muscle definition that we have almost come to demand of strong men.

He had only been through third grade, and he had a hard time reading or writing English. Still, we got along at once, mostly because he was so much at home that he saw no reason not to trust a stranger at the door. We agreed on a hundred dollars a month and I shook his hand. His fingers were twice as thick as mine and soft, padded.

Margaret had stayed behind on the West Coast for an extra week. Now she was driving her way across in our old Dodge. I still had the rental van, though I had unloaded it into the house. When she arrived in Fort Kent we went out to the house together. She followed me as I turned off the state highway and began driving along a farm road that climbed long, gentle hills planted with great green fields of potatoes. In the rearview mirror I apprehensively searched her face for signs that she might be unhappy. There were none. From half a mile off, she says, she spied the house. And that was that; for the five years we

lived in it, she never complained about the chipped siding or the icy bathroom window.

Orenie kept a few steers on a steep hillside pasture next to the old barn, and each fall he shot and butchered one or two for his freezer and ours. He hated doing it and I never watched, but Margaret without fail would go out to the barn where the carcass was hanging. A dog or two circled the blood and offal. Orenie explained to her what he was doing and why he had to be careful about cutting around the gall bladder. Margaret retrieved the heart and liver and kidneys, which Elsie would have nothing to do with. Into our freezer they went. Not content with this, Margaret once struggled into the house carrying an entire hide, still wet. We hung it in the basement and set to work scraping. Orenie, who so far as I can remember never laughed at anyone, could not help smiling. The next spring, I threw the thing away. It was not scraped clean enough for tanning: I can still see patches of the incredibly tough membrane that defeated us.

Our neighbors never felt isolated. Indeed, when after five years we finally left Maine I think they were genuinely puzzled and perhaps even hurt that we could do such a thing. But from the beginning we left Maine several times a year for a week in Quebec City or Montreal; more often, I suppose, we went south to Bangor or Portland or points beyond.

We quickly learned that there were two ways to go south: the safe way and the interesting way. The safe way was through Caribou, Presque Isle, and Houlton, which is a mile or two from the northern end of Interstate 95. In theory this should have been a beautiful drive, because it crosses the heart of Aroostook County's potato area, which stretches from Caribou south about to Houlton. (Up in Fort Kent we were in an outlier, a patch of arable land sheathing the St. John.) The trouble with this safe route was that it was civilized: there were houses everywhere from Caribou on south. Worse, there was traffic, including lines of semis full of bagged potatoes.

And so, except in the worst weather, we always took the slower but interesting way. We left our house, went west half a mile, and crossed the Fish River, which runs north to join the St. John at Fort Kent. We came up the other side of its valley to the stop sign at State Route 11. Here we turned south, on this the most romantic highway I know of, and ran upstream alongside the Fish, then past Eagle Lake and along the west side of the Maine woods. The Empty Quarter I call it: the hundred twenty miles to Sherman Station and the Interstate, with almost nothing but trees and brooks, the occasional moose, and, in summer, blackflies -- invisible until you stop your car and step outside. Instantly, you hear them, see them, feel them in your hair. The Acadians call them *bruleurs*, not a bad name, I think: "burners."

Route 11 was not plowed very often in winter, and it had long, even grades on which, if you lost traction, you'd be stuck until somebody came by. That was the risk, and it explains why people checked the forecast before setting out along the road in winter. Yet on a deserted night after a fresh but not impassable snowfall, you could turn off your headlights and drive perfectly well by the light of the moon.

We were always eager to get back to Fort Kent, to the turn-off that would bring us home, back across the Fish. From Route 11 we looked across the Fish River valley and saw our house, dark and cold in the dead white of the fields. Within an hour I would have the wood stove roaring and the house comfortably warm. In a strange sense the scene was, and is, almost like a photograph: it was an image we held in our minds like a favorite picture in an album. I can see it now.

Elsie once told me that in her childhood, and even in her own married youth, husbands had almost always left their wives after the potato harvest and gone to work in the woods. The wives were cooped up with eight or ten children and as many cords of firewood. They had a cellar full of potatoes and buckwheat, and they had countless quarts of canned meat, much of it wild. For greens, everyone relied on canned ferns, the brook-side "fiddleheads" that Orenie and many of his neighbors still hunted each spring, even in my time. Once or twice each winter a husband would return home with the family's workhorses, and his wife would finally get a chance to go into town.

It was this female isolation, I think, that bred into the St. John Valley women that nervousness that is so characteristic of them. This same isolation perhaps explains why Elsie and the other housewives on our road drove into Fort Kent almost every day, regardless of weather and often with the flimsiest of excuses. None of them had cars more than a couple of years old, and they all drove fast.

Elsie remembered when the work of sorting potatoes had been done by hand, by women working in cold "potato houses." ("*Caves du patate*" was the French here. I never heard my neighbors say "*pomme de terre*" or even "spud." It was always potatoes or the softer-sounding *patates*.) Helped with a bit of rum, a wife worked her way through several hundred barrels of potatoes. That's why Elsie could hardly be dragged to a potato house now, even if only to see seed potatoes being cut mechanically. I used to watch the machine, though. The potatoes passed over a table with increasingly large perforations. The small potatoes fell through the first holes and would be planted whole. Larger potatoes fell through bigger holes and were grabbed by spinning wheels and impelled past a knife that cut them in half. The biggest potatoes went to the end of the table, fell through the big holes there, and were cut into three pieces by a knife with three blades.

That wasn't the only thing that had changed on St. John Valley farms. I think of Orenie's older brother, Leonard, who, like so many Valley children, had long ago been forced south to make a living. (Farms here are not divided with each generation: the son who the father judges to be the best farmer takes the farm over, and everyone else leaves.) Every year, however, Leonard came home from Connecticut for a couple of weeks. Prompted perhaps by Elsie's talk about cutting seed, he told me one day about the numbing boredom of planting potatoes the old way, with a horse-drawn device that was equipped with a bin full of cut seed, colters to open two furrows, and tubes leading to each. Hour after hour, he said, you rhythmically picked up a piece of seed and dropped it into a tube, through which it fell into an open furrow. There was no nostalgia in his voice.

Out of curiosity I once stopped in at the state archives in Augusta to dig up the earliest census reports I could find for the farm. I think it was the 1880 census, and the returns, in manuscript, were difficult to read. But here was the farm: the family name gave it away. And here were potatoes: ten acres of them, along with suspiciously equal amounts of buckwheat, rye, barley, wheat, and oats. There were some cows, some sheep, some chickens, some apples.

The cows were still around, of course, and so were a couple of ancient apple trees. (They were Transparents and still gave good apples, though some main branches had been broken and lay sadly recumbent on the ground.) Orenie grew about a hundred acre of potatoes each year, a lot more than his ancestors, but a hundred acres was the minimum average needed to break even these days. He grew an equal amount of rotation crops, usually oats but occasionally a crop of beautifully red-stemmed buckwheat. Everything else was gone: chickens and sheep, rye, barley, wheat. Wheat, in particular, nobody in Aroostook County had grown for a long, long time.

Things had been changing even in the pioneer times of Orenie's great-great-grandfather. In New Brunswick, after all, you see long, thin farms laid out like wooden tongue depressors, with one narrow end touching a river. When the river frontage was all taken up, the settlers laid out a second row of farms, stepped back and separated from the first by a road. You often see three or four ranks of farms set back this way in the hills around Lake Temiscouata, and the same pattern was established on the American side of the St. John Valley when the Acadians arrived in 1785. It has never been eradicated. The names of the owners haven't changed much, either: Daigle, Nadeau, Martin, Pelletier.

But here, seven miles south of the St. John, the pattern of farms did change. Instead of long, narrow lots, the farms were domino-shaped and arranged in a neat paving within a framework of square townships. I don't know exactly why this happened, but state-government surveyors demarcated the townships and somebody came along and laid out the lots without regard to drainage or

topography or vegetation. Old cadastral maps show how our township, called New Canada, was surveyed into several hundred such tidy rectangles.

And so Orenie's great-great-grandfather found himself on a lot that was almost bisected by a maple-covered hill. He put his house along the south edge of the lot, close to the road, and his fields wound up in two blocks, one on either side of the hill. It was no improvement on the French system.

On the warm days of summer we would go swimming at the Fish River Falls, a few miles upstream from Fort Kent. The falls really are just rapids where tea-colored water pours swiftly over steeply dipping gray shales. We would step in the river below the main drop and be carried swiftly downstream an exciting fifty yards, until the water lost its velocity. And most afternoons we would hear a train. The tracks were set back not more than fifty feet from the far side of the river. I would look up in vain. The trees were too thick. I could see nothing moving. All I got was the theme of the engines and the coda of the wheels.

This was a branch of the Bangor and Aroostook, the railroad responsible for the greatest change that has come to Aroostook County in the last hundred years. The railroad arrived in 1893, and thirty years later it was carrying out of Aroostook more potatoes than were being grown in any other county in the United States. It was an amazing turnabout from subsistence agriculture: by 1921, USDA experts praised Aroostook farmers for their use of "the most up-to-date methods of fertilization, cultivation, spraying, and harvesting."

Nevertheless, the county's heyday was brief, about a single generation, and it's hardly too much to say that when it was over many farmers had nearly worn out their land in the potato orgy.

In a way it's hard to blame them, for prices were cyclical and growers were easily trapped into maximizing production of the one crop that was profitable this far north. In the 1920s the typical Aroostook farmer still used long crop rotations: potatoes one year in four, followed by three years of oats and grass. But during the Depression potatoes sold for fifty cents a 180-pound barrel. The farmers tried a cooperative, but their hopes of stabilizing the potato market were disappointed, and the co-op soon became nothing more than a farm-supply store. Like wheat farmers on the Great Plains today, the Aroostook farmers did the only thing they could to increase their cash flow. They grew potatoes one year in three, one year in two; many grew potatoes year after year for a decade or more.

World War II brought high potato prices and the all-time production peak for Aroostook: one hundred and fifty thousand acres of potatoes grown by three thousand farmers. These were good times, but Soil Conservation Service experts reported that "rotations are very short, generally consisting of 1 year of potatoes and 1 year of crimson clover." Organic matter was being lost, they

said. Erosion was increasing. Things were so bad that the Soil Conservation Service chose central Aroostook as one of a dozen demonstration sites around the country, one of the places where erosion control was most urgently needed. In 1940 the agency's experts wrote that "if soil losses continue at the present rate, crop yields are bound to decline in spite of heavy fertilization." Rock outcrops were already appearing in the fields, the same rock that forms the Fish River Falls.

Then came Idaho. I was born in that state and will say nothing against it. The Snake River plains in the southern part of Idaho are level, and they are blessed with deep volcanic soils and a growing season that is long enough not only for the round-white potatoes grown in Aroostook but for premium russets, which are preferred not only as bakers but for french fries. Idaho does have a problem with inadequate water, but the American taxpayer has solved it by subsidizing irrigation projects like the Minidoka, which irrigates the fields around Twin Falls, where I was born.

Idaho's crop was half as big as Aroostook's in 1930. It overtook Aroostook's in 1960. There has been no turning back. Nowadays, Idaho grows five times as many potatoes as all of Maine. Thanks to the Bureau of Reclamation's Columbia Basin Project, even Washington State now has a crop three times as big as Maine's. For a while, when the U.S. Corps of Engineers was investigating the possibility of building a huge dam upstream from Fort Kent, there was talk of an irrigation pipeline to supplement the erratic Aroostook rains. But this was the 1970s. Irrigation had lost its mystique, and the pipeline and the dam itself finally vanished like a Cheshire cat, its smile basking on government-document bookshelves.

The Aroostook farmers welcomed the manufacturers of french fries, but processing plants need lots of clean water, and the Aroostook River down by Caribou was soon fully burdened with processing-plant effluent. Sugar beets were tried. I remember touring a magnificent and federally subsidized mill east of Presque Isle. A few years later it was closed, with incriminations from all sides. The mill was taken apart, German bit by German bit, and reassembled somewhere in Quebec.

Maine's market share has steadily declined since then, despite occasional good years. In 1976, for example, potatoes hit fifteen dollars a barrel, with heavy exports to Europe. The next year Europe had a good crop, and at least some Aroostook farmers hauled potatoes to the dump. In a way it was their own fault, because they had abandoned their traditional domestic customers. They now found that those customers preferred to stick with the western suppliers they had turned to the year before.

Less than a hundred thousand acres of potatoes are now, in 1990, grown in Aroostook County; shockingly, fewer than a thousand farmers are still in

business: that's a third of the number in 1945 and a sixth the number in 1900. In a way, cropland retirement is probably the best thing that could happen to the county's overused fields, many of which are now so shallow that farm implements break each year on rock outcrops. But it is one thing to advocate retirement in principle; it is another to advocate it in a real community. I certainly never felt that we needed more trees around *our* house, not with the Empty Quarter in sight from our upstairs windows.

Practically overnight, rumors about people losing their farms materialized as accomplished facts. In the wink of an eye, there was some paperwork at the bank and the county courthouse; the next thing you knew, a man who had been a farmer was working at a job in town; the only thing he kept of his farm was his house and an acre of ground. The rest was taken over by somebody else, probably a neighbor. The best fields stayed in cultivation; the rest went to pasture or all the way back to forest.

The most dramatic case I knew of concerned Tommy LaChance, who had bought a group of farms covering several thousand acres in Daigle, the township to our south. I never saw him; I just saw his two-engine plane, which often sat next to the airstrip he had bladed out in the middle of the vast and level forest opening that was his farm. He used the plane to go back and forth between Maine and another operation he had, on Long Island I think. I never paid much attention to LaChance, but after leaving Maine I heard from friends that he had gone out of business after a particularly bad year. People didn't put it that way, of course; they said that LaChance had "lost his farm."

How LaChance handled the blow I don't know, but I remember men whose smiles shrank to one side of their faces. They took pills for their heart. They felt that they had failed the generations of their name. The miracle really is that farmers like Orenie survived.

Much of the credit was Elsie's, for she was a fiscal monk, refusing to buy anything on credit. Everything from tractors to snowmobiles waited until there was cash in hand to buy it outright. Most of the farm equipment that Orenie bought was already used; he picked up at an auction that nobody wanted to talk about.

Orenie also owed his survival to the most tenacious kind of land husbandry. He had places in his fields where beds of shale (he called it "ledge") lay only a few inches below the surface. The soil upon that rock was nothing but a veneer of weathered glacial till, fearfully erodible early and late in the crop year when the ground was unprotected by vegetation or snow.

That's why Orenie farmed on the contour, even though doing so has become increasingly unpopular as farm machinery grows larger and larger and becomes more difficult to steer around tight curves. He rotated his fields without fail,

even though oats and buckwheat don't pay unless you factor in the higher potato yields that come with rotation. I don't think Orenie did any such factoring: it became commonplace only after we left Maine, when the Soil Conservation Service, despairing of farmers who abandoned contour planting, began publicizing the long-term economic benefit of rotation crops. Orenie rotated out of a more primitive, instinctive sense of what was proper.

We had another neighbor who showed me how strong that land-caring instinct could be. His name was Wilfred, and he was physically smaller than Orenie, less outgoing, less happy. But I remember an afternoon shower that washed out one of his freshly planted fields. Seed was scattered everywhere, and the roadside ditch was filled with sediment that had washed in from gullies that lay across the field in branching patterns like the shadows of dead maples. Wilfred went out and replanted, of course, but what was remarkable was that at the end of the season he hired a loader and dump truck, filled it at the roadside ditch, put the soil back up on the top of his field, and smoothed it out with his own geriatric bulldozer. It was like something out of Asia or Germany. It was almost un-American.

Still another plus for Orenie was that his farm was at the northwestern edge of the potato-growing part of Aroostook County. Because of this, he and Wilfred were able to specialize in growing high-priced seed potatoes, rather than tablestock or potatoes for processing. The logic is simple: seed potatoes must be free of viral disease, for which there is no cure. The only way to keep them free is to farm in a remote spot to avoid infection in the first place.

Remote we were. Still, Wilfred put "keep out" signs around the fields where he planted his first-generation seed. In the same way I remember asking Orenie one day where he had planted *his* first-generation potatoes. He told me, but it was the only time a question of mine ever made him uncomfortable, and when I walked up to look at the innocent rows I kept my distance. A short time earlier I had visited the Porter Farm, where the state produces the potatoes sold to commercial seed growers like Orenie and Wilfred. It, too, was on the edge of the cultivated area, but farther south, west of Presque Isle. It was surrounded by forest. A sign at the entrance instructed visitors to drive through the disinfectant pool; shoes had to be treated, too.

Looking back on the farmers I knew here, I see not the roller coaster of prices and production in Aroostook but something more fixed, something with the permanence of a constellation. It's odd, really, because I know that farming had changed in Orenie's and Wilfred's lifetimes. Both had adopted new kinds of equipment. Both used chemicals in quantity. Both were alert for better ways of farming. Yet these changes were made for the most conservative of reasons. Neither man had an eye to building a fortune, or getting ahead, or becoming an agribusinessman. In May, both of them got to work with an energy that I do not

think I can distinguish from the force that drove the sap that rose in the hilltop maples.

The first rains had come by then, like music after months of noiseless snow. Our single-lane road and the roof of our house had turned black again, and the eaves dripped continually into piles of mushy snow. Houseflies appeared, sluggishly basking on southern walls. The fields were mostly bare mud, so slippery that walking up even the gentlest grade was almost impossible. Yet Wilfred couldn't resist. He took his old bulldozer out and broke up the last drifts to speed his fields' drainage.

A couple of weeks later I would be awakened by the sound of potato planters. It wasn't the first machinery of the season: tractors had already combed the fields with harrows. But the planters were ingenious machines, adapted from modern corn planters. They had two bins that funneled seed close to the ground. Discs rotated past the bottom of each bin. Each disc had holes in its face, and a spring-mounted spike snapped through each hole to impale a bit of potato and bring it down to the furrow. The spike then withdrew through the disc and left the seed on its own in the ground, with a dose of fertilizer. A blade covered the furrow over and the planter moved on slowly, noisily clicking as the spikes snapped. It was a distinctive sound, mechanical in a world of silent electronics, pleasantly slow in a world of blizzarding digits. "Orenie's planting," I would say, meaning that I wanted Margaret to enjoy the sound, too.

A few weeks later Orenie and Wilfred had to start walking their potato rows to pull out the very occasional plant infected with viral disease. (It's a peculiarity of the disease that it's visible only in cool climates; that's why growers all over the country buy seed from northern producers, either in Maine or in places like Minnesota.) The potatoes had to be hilled, too, lest the sun burn them. The job was done with a special machine with "ears." That's what the farmers called them. It was, I suppose, really just a small plow with opposing moldboards. The potatoes now began to look like something. I'd drive by, squint, and imagine that I was looking at a citrus orchard, with heavy green rows of trees marching along.

These were the weeks when the weather could fail. One year Margaret and I came back from a short vacation and found Wilfred and Orenie in somber conversation. The potatoes were black and limp. I thought that some disease was to blame, but I didn't want to interrupt to ask what the trouble was. Later, I asked Orenie privately. It wasn't a disease. There simply hadn't been any rain. Elsie's vegetable garden could be kept alive with occasional dousings from the tank truck, but the potato fields were too big for that. The farmers were planning to pray for rain. They would hold a special mass in Orenie's potato house.

Such a thing would never be approved by the local priest, I thought, but I was wrong. A couple of days later I went down to the potato house, a building that was hardly more than a concrete slab under a roof and four walls. Orenie and a couple of his sons were scrubbing away the musty smell of last year's potatoes, which had either been shipped south some months earlier or planted in Orenie's fields. An altar was being improvised with planks supported by potato barrels. On it, displays of potatoes were set out in baskets made of ash: sturdy baskets with a slightly flexing handle. Elsie had cut a few handfuls of this year's oats -- still green -- and had tacked them to the wall like fleurs-de-lys.

About twenty farmers and their wives came to the service, which was simple and brief. For the next day or so I kept an eye on the sky. So far as I could tell, nobody talked about rain or complained when it did not come. But rain did come, after I had given up waiting but soon enough to save the crop.

There were a few days each summer when Boston's mugginess drifted up, but most days were warm and clear, with cool nights. It was a good time to go fishing, and Orenie would take his homemade trailer out to the Empty Quarter and come back with landlocked salmon. (Fried fish was a lunchtime staple throughout the year, along with red meat, salad, and, of course, potatoes. The potatoes were princely, but they were never baked. Mashed was the rule, and invariably peeled. What Elsie thought of Margaret for mashing unpeeled potatoes she kept to herself.) The only fieldwork to be done now was spraying for blight. Every ten days, somebody went through the fields with a tractor pulling a tankcar fitted with booms that reached out and laid down a swath of clear spray. Most Americans have learned to disapprove of such things, but I always watched the spraying and thought about Ireland in the last century and what a difference spraying would have made there.

The chemical that even the farmers hated came a bit later: this was the "topkill" applied in August. It was a necessity because the Aroostook frost-free season is about a hundred days. Round-white potatoes need about ninety to mature, plus two weeks to harden before they can withstand the rough handling of harvest. If a farmer waits for the crop to die naturally and harden, he risks losing it to a killing frost.

Early in this century Aroostook farmers began topkilling with sulfuric acid, but years ago they switched to general herbicides, bought by the barrel. Every farmer I knew had horror stories about the stuff. All of them had felt sick from it at one time or another, and their fastidious wives complained about the ineradicable stains it left in clothing. The herbicide's effect on potatoes, of course, was devastating. The colloquial expression was that the fields had been "burned." They certainly looked it. Within a week the miniature orchards were gone. The ground was bare, with flaccid tangles of old stems, black, torched.

The oats and buckwheat had already been harvested with ancient combines whose continued operation amazed me. The winds were already cold. (They had turned with an amazing snap: one day came, and you knew summer was over. Everyone knew it.) The hardwoods were turning magnificently, especially the sugar maples on top of the hill behind the barn. I used to wander up there, kicking dead leaves and stopping at the bases of the big maples to lean against them and listen to the silence.

Mechanical harvesters were introduced in the late 1950s, and by 1970 almost every farmer in Aroostook had one. The great advantage of the machines, with headlights of course, is that they can work at night. This is tremendously important in a place where farmers continually worry about a killing freeze. And so it was that when I drove through Aroostook at night during harvest I saw what looked like brightly lit yachts moving slowly across a gently rolling sea.

Some of the harvesters were self-propelled; others were pulled by tractors. In either case they were big machines, digging two rows of potatoes and bringing them by conveyors to a sorting table, where a crew tossed culls and rocks aside. The potatoes were carried along the conveyor to an arm where another belt lifted them up high enough to fall into dumptruck crawling alongside. As soon as the truck was filled, it took off for a potato house and was replaced by an empty.

This was dangerous work. Arms were often broken, partly because the sorters got so cold, standing all day on a platform that kept jouncing as it moved along. Nobody liked working on the machines.

And here again was tenacity, for Wilfred insisted each year upon harvesting one field by hand. Margaret asked him why, and his answer makes me almost bless his taciturn soul. He said that he liked the way it looked. That was all he said.

He couldn't conduct the operation with historical exactitude because he didn't have the horses that traditionally pulled the potato digger. Still, he had the old digger, which he pulled with a tractor. Lines of potatoes were brought to the surface, and old barrels were scattered over the field. Heaven knows how Wilfred had managed to keep those ancient things; Orenie only had a dozen or so lying around.

Wilfred had to get a picking crew, too. The St. John Valley schools still closed in late September and early October so that children could help with this traditional task. Few children did, for few farmers needed hand pickers. But Wilfred found two or three dozen willing youngsters, and each was given a sturdy basket, just like those used in the mass to bring rain. Each child took a row and marched along on hands and knees, filling the basket over and over and dumping it into one of the scattered barrels.

Each child had numbered tickets, which were put in the barrels as they were filled. Wilfred came by, picked up the barrels, pocketed the tickets, and at day's end paid each child by the barrel filled. The weather was as cold as it was for the sorters on the mechanical harvesters, but everybody moved a lot more, kept their arms unbroken, and had a good time.

By this time in the season, there were six or eight cords of firewood tucked into our basement, enough within our solid walls to keep the house warm all winter with one good wood-burning stove. Smooth-barked beech was the best: eight inches in diameter, twenty in length, heavy, and thirty-five dollars a cord, dumped at the side of the house. I would get up in the morning, get a few logs from the basement, stoke the stove, and heat up the house in half an hour, except for the bathroom. Later on I might go for a walk up the hill, look west toward the Empty Quarter and shiver a bit, as much from the sight of the cold and bare soil of the fields as from the air itself.

Deer season came and went, the one time of the year when I was careful to stay out of the woods. Moose in those years were still fully protected. One walked into Orenie's vegetable garden next to our house and looked up in boredom as a tempted Orenie handed me a rifle. I knew the local warden, a man named McPhee, and I didn't want to tangle with him. Besides, I didn't want to kill the moose. She ignored us and eventually drifted off, walking on legs that looked like stilts she wasn't quite used to.

We waited for winter. The rule of thumb was snow by Thanksgiving: permanent snow, snow for the duration. Sometimes Thanksgiving passed with the ground still umber, frozen--sullen I thought--but heavy snows did come, usually on calm and not very cold nights. You could go outside lightly dressed, lie down as the flakes buried you, and stay warm for a long time; the flakes muffled the air and silenced even the sounds coming from the nearby house. Later on, the winds would come, the violent weather that kept you inside. The wind built ten-foot drifts in a couple of hours and made you appreciate walls that weren't going anywhere.

In blizzards, when you could see nothing unless you looked straight up, the snowplows worked all night. They were just dump trucks fitted with a blade and loaded with sand that they sprinkled behind them like a defecating hippopotamus. They pushed the snow to the side until, after a half-dozen storms, the banks rose five or six feet. A payloader then worked its way along, laboriously pushing the banks back so the process could begin again.

On those blizzard nights, the rumble of the heavy blade on the ice always woke us, for there was hardly more than ten feet between our pillows and the pavement. (All the old houses were built that way: farther from the road just meant more snowshoeing or shoveling in winter.) The sound grew louder until the whole house shook: no rattling, just vibrations. We woke up and thought

that the plow would surely burst through the wall and kill us in our bed. But the driver had grown up with these winter nights, was perfectly at ease in them, even welcomed them. And so the truck would pass, a little Doppler effect in its wake, and the wind would quickly pick up the sound of the blade and carry it away to the south. We'd drift back to sleep. I remember the reflection of the plow's rooftop light, winking a fainter and fainter yellow in the window. I don't think I've ever felt more secure.

\*Revised but not updated from the version published as Chapter 1 of *At Odds with Progress: Americans and Conservation*, University of Arizona Press, 1991.