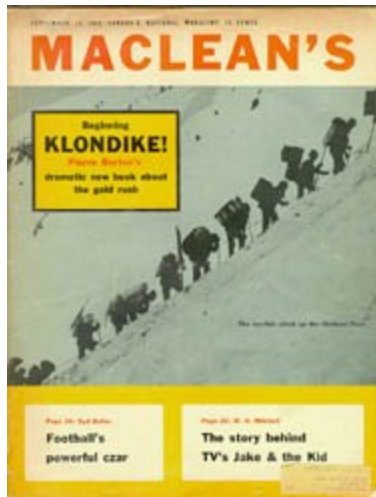




This full-length article appeared in Maclean's Magazine, September 15, 1958, and was penned by up-and-coming journalist Peter C. Newman. Photographs by Sam Tata.

The Utopian town where our atomic scientists live and play has no crime, no slums, no unemployment and few mothers-in-law. But maybe you wouldn't like it after all. Here's why

MAN'S ABILITY to split the atom has touched the lives of most Canadians only through impersonal newspaper headlines paradoxically promising a better life or total extinction. But to the residents of Deep River, Ontario -- a puppy bush settlement perched on the top of the free world's most powerful nuclear research station -- the atomic miracle is the routine reality which built their village, and made it one of Canada's most remarkable communities.

Born in the wartime rush to shelter the men who helped fashion history's most awful weapon, Deep River is now a dormitory for the thousand scientists and technicians from the nearby Atomic Energy of Canada Ltd. Plant at Chalk River. Tucked into a clearing on the shore of the Ottawa River in isolated lumbering country a hundred miles southeast of North Bay, the settlement looks like a metropolitan suburb. But it is a suburb without a city. Its sixteen miles of asphalt terminate abruptly at a barrier of virgin jack pine.

Deep River is a Utopian attempt to create a happy environment where all is ordered for the best. There have been no major crimes in Deep River; it has no slums, no stoplights, no unemployment, no cemetery, no beer parlors, and few mothers-in-law.

But at least some Deep River residents find its perfection tiresome. "There is something missing in our cotton-ball world," says Mrs. Winnifred Perryman, wife of Chalk River's chief metallurgist. "You can't even go out and do good

works." (The only man on relief at Deep River last winter was a local farmer who had broken both his arms.)

One physicist recently vented his feelings in a poem published by the North Renfrew Times, the community paper:

Although the town is trim and neat,
With cozy houses on every street,
Though saying so is indiscreet,
I hate it.

Such occasional signs of disillusionment are due in part to the company's paternalistic regimentation. A three-bedroom, ten-thousand-dollar house rents for only seventy-nine dollars a month, but incoming employees are forced to live in quarters assigned to them, where even walls are painted according to company edict -- ivory for the bedrooms, white for kitchens and bathrooms, and so on.

Cast out of their habitual urban surroundings into enforced isolation, and tinkering daily with the barely controllable force of nuclear reaction, many Deep Riverites feel they are living in a perpetually besieged garrison. They counter boredom and apprehension with a prodigious variety of leisure activities.



To fill the hours between supper and sleep, the scientists have organized sixty-eight clubs and associations, whose members, among other things, blow glass, chant medieval madrigals, and measure the crawl velocity of snails. At sundown, as the villagers hurry to their relaxation, the community assumes the atmosphere of a musical-comedy set, with groups of extras in bright tunics bouncing across the stage for the curtain-raising extravaganza. "Some people here just go crazy trying to sip the nectar from all the flowers," says

Fred Glendinning, the local public-school principal.

"Of all the free world's atomic plants I've visited, we have the most ideal setting for our village," claims Dr. David Keys, the former McGill professor who set up Deep River in 1944, and now acts as scientific adviser to Atomic Energy of Canada Limited's (AECL) president. Not everyone shares his enthusiasm. "We try to do so much that we have lost the art of relaxing," says

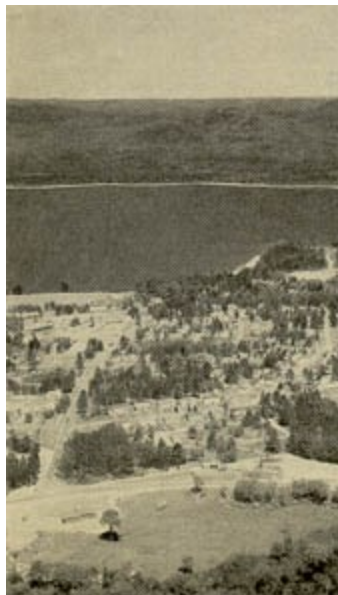
Dr. Ara Mooradian, head of AECL's engineering development branch. "The children are growing up in an artificial atmosphere -- and it isn't only the children."

"There is enough recreation to destroy home life," bluntly declares Father J. R. McElligott, the priest who ministers to this new parish.

On maps Deep River is identified only by an arrow pointing into the bush at a small crossroad on the Ottawa-North Bay highway. The community has been built with so little disturbance of nature that an aerial photograph shows more trees than rooftops. The northwest margin of the settlement ends at a broad bay of the Ottawa River. On the opposite shore the Laurentian foothills begin their languorous roll toward more formidable peaks on the eastern horizon.

The architects who designed Deep River planned a model community which would eventually accommodate twenty thousand people. The present population of forty-three hundred lives in a thousand asbestos-shingled houses and a large staff hotel. The shops are clustered in the central clearing -- a former camping ground of the Algonquin Indians.

There's a thirty-two-bed hospital, four schools and twenty buildings housing the community's indoor recreational facilities. Most of the streets are keyhole-shaped crescents devised to slow down traffic. Their driftwood-like signboards reflect the community's obsession with science -- Newton Crescent, Rutherford Avenue and Faraday Street.



Public buildings are heated from a central plant, through overhead steam pipes. The sudden spit of their exhausts on a winter night frightens the uninitiated passer-by. During January and February the temperature sometimes drops to nearly fifty below, producing some strange reactions among scientists accustomed to more moderate climes. Last winter one English biologist refused to leave his house except for the daily dash to the morning bus. His exit was timed by his wife's sighting of the vehicle from an upstairs window. Then, zipped into flying boots and almost hermetically sealed into his old school muffler, he would scoot out, clutching a thermometer in his double-gloved hands to check the temperature drop before leaping through the bus door.

At 7.45 every weekday morning Chalk River personnel are picked up by green AECL buses. Only the odd late sleeper drives to work. By 8.30 Deep River is a village of women and children, and its roads have been turned into playgrounds.

Children seem to have no respect for traffic, but a strictly enforced top speed of twenty-five mph has limited accidents to one fatality. That was in 1949. During the day, only the odd service truck honks its way through the unconcerned hordes of youngsters and the village's hundred and forty-five dogs.

Deep River's birthrate, at thirty-four new babies a year per thousand inhabitants, is one of Canada's highest. In July 1957, AECL decided to erect a highway marker giving the community's population as four thousand. Before the sign was painted nineteen more babies were born.

It's a healthy life for youngsters, but the restraining influence of a senior generation is missing. Two thirds of Deep River's population is between twenty-five and thirty-six years old -- only thirty-seven residents are over sixty. "The children here just don't get a typical picture of life," says Mrs. Vill Cooper, an engineer's wife. "They never see any poverty." When one family drove to Toronto last fall, they took their children on a tour of the slums.

The planners of Deep River, to avoid creating a snob hill, mixed house sizes and designs. But there's a class element in every society and at Deep River it shows up during the morning coffee parties. The wives of the scientists rarely invite the wives of technicians. "At work everybody is quite friendly, but at the village, the wives feel they have to show off," says G. R. Matteau, a local union executive.

Lunch is a quick and informal affair since the men eat at the plant cafeteria. Part of the housewife's day is habitually spent in the rite of touring the village's miniature shopping centre. Although a hundred and thirty miles deep in the northern Ontario forest, the stores carry many of the luxuries featured along New York's Fifth Avenue. The local A&P; has three kinds of caviar; a gift shop sells the finest Swedish crystal; there are couturier-copy suits in the dress salon; and the Eaton's branch has most of the store's better Toronto and Montreal lines. Shopping budgets are large. The average salary of the Deep River scientist is \$7,900. Most Deep River women make at least two trips a year to the big cities for their fashion ensembles.

Wives left in the dark



Women who got out to Toronto and Montreal last spring purchased chemises and T-strap shoes but back home they donned slacks and moccasins again. "We have no reason to put on the dog," says one Deep River housewife. "No one needs to impress anyone else; we all know each other too well for that. So we dress comfortably." Evening clothes are elaborate as a counterpoint to this

informality. In the summer the men go to work in shorts, open-necked T-shirts and sandals, no socks.

The women know very little about their husbands' work. Until 1946 Deep River was patrolled twenty-four hours a day by company guards. No visitors were admitted without a pass; even the villagers' relatives were accompanied from the gate by an escort. Although little of Chalk River's current work is classified, employees still have to take an oath of secrecy, because they have access to the secret reports of other countries.

One hundred and six PhDs are employed at Chalk River, among them some of the most brilliant scientific minds in Canada. Coffee- and cocktail-party chatter deliberately skirts any mention of the hazards involved in their experiments with new applications of atomic power. That the reactors' radioactivity has not quite been bridled was demonstrated last May 24, when a piece of uranium caught fire as it was being removed from the NRU unit. The flames were doused before anyone was injured, but the resultant radioactivity rendered the building useless for four weeks. There has only been one near catastrophe at Chalk River. On Dec. 12, 1952, the NRX reactor exploded in a blast of one-million-watt heat, allowing deadly radioactive neutrons to stream wildly through adjoining labs. Quick evacuation prevented any permanent injury, but several scientists suffered large doses of radiation. The breakdown was officially blamed on a pinhole leak in the reactor. The next day one of the affected physicists scribbled a jingle to the crew charged with the dangerous repair job:

It was no' but the size of a pin hole
But what we won't know for a while,

Is the name of the doctor of science
Who pushed the darned pin in the pile.

As each Chalk River employee leaves the plant he must walk by a battery of Geiger counters, which activate a jangle of alarms if he has absorbed excessive radiation that day. Most such doses are superficial, quickly removed with a thorough shower.

Chalk River scientists work in an enforced clinical atmosphere; there's little disorder and no hurrying. They tend the reactors dressed in white overall coats and red rubber slippers, moving with a precision which makes visitors feel unnaturally wary. The only noise is the whirr of ventilating fans.

Although such experiment requires the forethought of brain surgery, the reactors are mammoth machines, dwarfing their operators. The fifty-seven-million-dollar NRU, Chalk River's largest atomic unit, stands as high as a twelve-story building. Through its three basements gush a million tons of cooling water an hour, pumped from eighty feet down in the Ottawa River. The anti-radiation-shielded removal flask which manoeuvres the reactor's 199 fuel rods weighs 225 tons -- twice as much as the diesels which pull the CPR's cross-country Canadian.

For forty hours a week, the scientists work in this twenty-first-century atmosphere, probing the narrowing mysteries of atomic power. "All day you do nothing but generate data," says Ara Mooradian, the development-branch chief. "When you come home, it feels good to start hitting things with a hammer."

The Chalk River working day ends at 4.20 p.m. The men have few do-it-yourself chores at home, because the company's twenty-five repairmen install clotheslines, fix door knobs, repair dripping traps and otherwise maintain the homes. By 6.30 most families have finished their evening meal, washed the dishes, and are ready to begin the evening's activities. Many parents book baby sitters in September, reserving them a year in advance for three or four nights a week.



The shortage of teen-agers means that many of the sitters are recruited from the staff house, where the unmarried employees of AECL live in the informal atmosphere of a resort hotel. Men and women have rooms in the same corridors, wash their laundry in communal tubs. "Generally speaking," the house rules state generously, "men are not permitted in the women's rooms after 11 p.m. on weekdays, and after 1.30 a.m. on weekends."

The staff house has its share of resident eccentrics. One English physicist used to phone the manager regularly, demanding that people in the rooms around his be ordered to turn off their record players. When they did, he would switch his own gramophone on at full volume whistling and stomping in time to the loud marches it bellowed forth. Every four weeks another scientist would dump all his bills into a hat, then draw out the three he would pay that month. When the company repeatedly requested his board money, he threatened not even to include their statement in the next lottery, unless they apologized. An eviction ultimatum finally forced him to pay up.

In spite of eccentrics who balk at regimentation, Deep River's leisure activities are earnestly organized.

Jac Cropley, the muscular university-trained director of the community's full-time staff of twelve recreation experts, spends his time in scientific contemplation of how to involve the residents in planned fun. One of his office wall maps, for instance, shows the foot-by-foot zoning of village parks into "tot lots." These, in turn, are divided into play areas (acre lots equipped with swings and teeter-totters) and casual play areas ("plots cleared sufficiently for spontaneous activities, but containing no equipment"). "Our philosophy in sports," says Cropley, "is to emphasize participation rather than competition, to develop an appetite for the enjoyable use of leisure."

In most Canadian communities, recreation directors regard a fifteen-percent participation in their programs as the obtainable maximum; Cropley claims ninety-five percent of Deep River's inhabitants use his facilities.

Snail watchers and wine tasters

To run his empire of merriment, Cropley field-marchals a daily crew of four hundred volunteers. Although the population is just over four thousand, the traffic through the main recreation hall has exceeded fifty thousand people a month.

Deep River's recreational fervour infected even Dr. Bruno Pontecorvo, the brilliant Italian scientist who lived there for the four years preceding his disappearance behind the Iron Curtain in 1950 with many of the West's most precious atomic secrets. Pontecorvo belonged to the sports-car association, won the tennis singles championship, and joined five other clubs. His one peculiarity vividly recalled by neighbors is that when someone asked him how much coal his furnace burned, he replied that he really didn't know, since his wife shoveled out all the ashes, and he had never visited his basement.

The search for new relaxation outlets has become so intense that when Dick Attree, a research chemist, recently tried to organize a snail-watchers' association, letters to the editor of the North Renfrew Times suggested the formation of a Society To Watch The Snail Watchers. Later, the Snail Watchers accused the Deep River Wine Tasters and Gourmet Club of eating their snails.

The cost of operating Deep River's recreational facilities exceeds a hundred thousand dollars a year. AECL contributes twenty thousand dollars of this.



The balance is paid by the residents through fees and special building-fund appeals.

The yacht, golf and curling clubs, with three hundred members each, are the most popular with adults. But smaller, fiercely active groups skin dive, play rugger and soccer, race ice boats, bowl, fence, and play badminton.

Lacking a winter practice range, the

Rod and Gun Club has dug out the basement below the bowling alleys for semi-weekly shoots.

Those who don't like sports (and some who do) dance or play music. As well as three ballet groups, a square-dancing club and a Scottish country-dancing association, there are seven orchestras, including Phil Rowe and his Atomic Five. The Deep River Players put on three major productions a year. They have special showings for baby sitters who can't watch the regular performances.

Gardening is probably the most time-consuming hobby because all the topsoil has to be brought in by wheelbarrows from the surrounding bush. One

scientist grows exotic plants in his flower beds, but draws the line at the prosaic job of cutting grass, letting it grow unattended all summer long.

Despite all this self-generated activity the commercially operated Strand Theatre changes its program four times a week. Films include the best French, Italian, Swedish and Russian imports. The 569-seat theatre is filled twice every night. "I wouldn't know there is anything else going on in town," says Ross O'Regan, the manager.

The movies don't suffer much competition from television. Three hundred Deep River homes have sets, but the village's location halfway between Ottawa and Rouyn, Que. -- both with stations broadcasting over channel four - means that sometimes the English picture is backed by French commentary. The community library, operated by fifty volunteer housewives, has the highest book-circulation rate in Ontario -- members borrow an average of thirty-four volumes each year.

Occasionally Deep River has a special spree. The nuclear physicists roasted a whole ox as their contribution to a giant picnic held to mark Queen Elizabeth's Coronation in 1953. They approached the operation with the same precision -- but not the same efficiency -- with which they heat uranium rods to 370 deg. F, controlling the process to 1/100000th of a degree. The scientists elected a watchclock committee, and hoisted the animal, punctured with a battery of thermostats, onto a specially designed automatic spit. After days of calculation, roasting time was set at twenty-five hours. The spit broke down after the fire was lit and when the ox sandwiches were finally served, the middle of the animal was still raw.

Visitors to the village are surprised that the scientists, who are usually thought of as tending toward agnosticism, show a high rate of attendance at church. As well as Catholic and Anglican churches, there is a Community Church comprising the members of twenty Protestant sects, which has fifty-five PhDs in its congregation. There are few vocal agnostics, but the temperamental physicist fired a few years ago as a choirmaster, because he yelled too much at his choristers, wreaked a strange vengeance. He lugged all the church music to the top of a small hill overlooking the village and let the hymn sheets drift gently down over the rooftops.

The present choirmaster is Fred Glendinning, principal of the public school, which has grown from six to twenty-three rooms in the past ten years. "This is an excellent situation for an educator," he says. "They pay you enough to let you live graciously and whatever you need to make education better, you get."



Salaries for Deep River teachers range up to \$8,100 a year -- the equivalent of Ontario's best big-city collegiates. The schools have a system of accelerated grades, so that exceptional pupils can graduate from high school at sixteen. During a recent grade-nine IQ test designed for completion in half an hour, one physicist's son got a perfect score in less than twenty minutes -- giving him an IQ rating of 150-plus (110 is considered adequate for university admission).

The school was one of the first completed buildings, when Deep River was built partly by German prisoners-of-war in 1944. The village was created as the result of Winston Churchill's decision at the Quebec Conference that Canada should become the site of the

Commonwealth's contribution to the U. S. Manhattan Project, which produced the atomic bomb. Chalk River was picked because of its isolation, yet relative proximity to the labs of the National Research Council in Ottawa, and because nearby Deep River provided a suitable townsite. Deep River's name perpetuates an Indian legend that the water in this section of the Ottawa is bottomless. Actually, the deepest point measured is 290 feet.

Two years ago Deep River's status as a company town was changed to an improvement district -- the intermediary step to self-government. AECL has transferred all the company-built essential services to the municipality, giving it a debt-free start. About three hundred houses have since been sold to their occupants for ten percent down with five-and-a-quarter-percent thirty-year mortgages. These owners have begun to pay taxes on their properties.

"As the majority of the company's employees come from urban centres, we realize that to keep them here, we have to try and develop a community with municipal, educational and recreational facilities comparable with the big city," says Tom Morison, the head of Deep River's Board of Trustees, which now runs the village. "I think we're succeeding. People are staying here." Chalk River's staff turnover is no higher than that of the National Research Council in Ottawa.

The contentment of Deep River's citizens oscillates sharply with the seasons. In the summer no one wants to leave. "I hesitate to take my holidays, since I'd go to a place something like this anyway," says Matthew Shannette, manager of the Bank of Montreal branch. Two American engineers, transferred out of Deep River last year, drove a thousand miles from Washington this summer to return for their vacations. But the isolation of winter infuses a different kind of mood. Last January when the United Nations advertised for two nuclear scientists, eighty of Deep River's hundred physicists applied for the details, though none took the jobs.

Looking down the shelves of birch patches that slope toward the slack current of the Ottawa, Ara Mooradian, one of Deep River's civic leaders, recently summed up the feelings of many villagers: "Most people who leave here wish they were back," he said. "But the ones who are happy to be away, are very happy to be away."