The vanishing splendor of old movie houses
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A lot of people around Moose Jaw are probably still scratching their heads over the strange woman they met last summer. Oh, she seemed normal enough... except that she tended to open conversations with bizarre queries like: 'Seen any cougars lately?' Well, not to worry. That was Grace Lane and she was merely researching 'Return of the Animals,' an article that appears in this issue. 'I never expected to become quite so familiar with mountain lions and grizzlies,' she says. As a matter of fact, Mrs. Lane isn't even a nature writer... by nature.

She's a freelance journalist and broadcaster with a thrice-weekly radio show in Moose Jaw. An ex-Torontonian, Mrs. Lane was the first women's editor for The United Church Observer from 1961 to 1963. She had to relinquish the position when her husband's work took them to Moose Jaw. Before 'Return of the Animals' Mrs. Lane had written only one nature piece, but she wasn't the least bit cowed by the unfamiliar subject. "You can "bone up" on any subject if you interview enough people and read enough material," she says. "It's part of the fun of writing." ☺
The wax lab in the research center at Imperial's refinery in Sarnia is a cluttered, no-nonsense sort of place. Early this year, though, it looked like a small chapel. On a workbench lined up against one wall were about two dozen candles, all lit. In the twilight of an early February afternoon they flared and guttered, a severe, slightly funereal tableau in the midst of a busy industrial laboratory.

But no religious services were going on. The wax lab and its technicians were intent on business—checking the burning qualities of paraffin for an Imperial customer, a candlemaker with a problem.

The candlemaker reported that when he changed waxes to improve the burning of his candles—thick, decorative candles known as "pillars"—the color of the wax was uneven. Splatters of white or discolored wax ruined their uniform tone.

The problem of waxing candles was not new to Dr. Dave MacLeod's wax lab. Dave MacLeod is a Scot with a doctorate in physical chemistry from Aberdeen. He has been a researcher with Imperial for 17 years. For weeks last winter, MacLeod and his technicians made candles, trying to duplicate the manufacturing process of the candlemaker, and hence discover why the wax went splotchy.

Laboratory analysis provided the answer. The splotchy appearance that troubled the candlemaker was due to an irregular crystalline structure of the particular wax the candlemaker used. MacLeod was able to recommend a wax that would deliver the characteristics the candlemaker required and at the same time retain uniform color.

MacLeod's lab exists to service customers of Imperial's paraffin products. And that's a sizeable list. Canadian industry consumes some 90 million pounds of wax a year and the consumption continues to grow.

It wasn't always so. In the early 1960's, wax seemed destined to extinction when the then-familiar waxed paper that protected a schoolchild's sandwiches was discarded in favor of thin, clinging sheets or bags of plastic. The waxed paper that bread was sold in disappeared from bakery shelves; plastic wrap replaced it. Waxed milk cartons almost vanished as plastic coating came to the fore.

The big paraffin slump began in 1963, the year plastic breadwrap came to Canada. The market fell apart in 1965 when the dairy industry discovered plastic. The two Canadian producers of refined paraffin—Imperial is one of them—together lost about 12 million pounds of a total 14 million pounds per-year dairy wax business.

Catastrophic.

The Sarnia refinery reduced its paraffin output. 'We just didn't make all the wax we could,' says Grant Moffat, a technical specialist on waxes with Imperial's marketing division. 'Instead we cracked the long-chain hydrocarbons of paraffin into shorter chains and used them in other petroleum products.'

Paraffin is a long-chain hydrocarbon. It consists of two elements, carbon and hydrogen—hence "hydrocarbon"—linked into long chains. The carbon atoms provide the link; the hydrogen atoms attach themselves to the carbon in the fashion of pradicts on a necklace.

When the bottom fell out of the paraffin market with the loss of the dairy business, Imperial's waxes, those
text a piece of wood-dipped board he produces it by hand. Hand-dipping is an acceptable, economic substitute for automatic machine dipping provided quality isn't important; but there's no laboratory method of applying a uniform film of the high-velocity wax-polymer blend that duplicates the curtain coater.

In a way, the curtain coater is inescapable: a piece of heavy industrial equipment used as a research tool in a chemistry lab. It's unexpected, perhaps, but not totally disconcerting when candles on the lab bench 'talk.' Wax itself, for that matter, comes in a bewildering number of guises.

Paraffin is a generic term applied to waxes that are derived from a petroleum base. Chemically the various paraffins differ in the number of carbon-hydrogen links in their molecules; the number varies from 18 to 70 and more. Physically they differ in a number of ways: oil content, viscosity, specific gravity, but the greatest physical difference is their melting points. Candles are made of wax with a low melting point, but a paper plate, which may be used to serve a hot meal, must be waxed with a paraffin that doesn't melt as readily.

Imperial markers 10 graded paraffin waxes, each with a different melting point. Each grade is labeled with a number indicating its melting point in degrees Fahrenheit. Thus, Wax 158/160 melts in that temperature range and, in one application, is used in the manufacture of the black, right side of postage paper. A low-melting-point grade, such as 125/127 coats the flame-end of paper and wooden matches, to improve burning.

These and related paraffins find their way into a lengthy list of everyday products. The wax seal that a housewife puts over her jelly in Parow's is just one of the many old uses for paraffin. Its use is known to the ancients; it is one of the most important products ever invented.

Still, for all the new applications found for paraffin, its immediate future is tied to rigid-when-wet corrugated paper. The market today is already large, but it's just a drop in the bucket. It's unquestionably the fastest growing segment of the industry today, says Grant Moffat. There's only one cloud on the horizon: that threatens to darken this rosy future.

Already chemists fiddling with cellulose have discovered a way to chemically alter the wood fibers of corrugated board during manufacture. The change makes the finished board water repellent without further treatment. Now it's a matter of finding the right cost-effective formula. If costs can be whittled sufficiently, paraffin and the corrugated box industry will exchange a farewell kiss and the former will be on its way to being on again for new markets.

But the wax producers are used to that. They've had cut-and-run affairs for years with various branches of industry that use waxes enthusiastically until someone comes up with a plastic that's just a little better. And the wax producers are left holding the bag. But wax remains a very cheap, infinitely adaptable form of waterproofing and it's available in abundance. 'You can keep it down' says Moffat, 'there'll always be new ways to use wax.'

Chemical engineers are the lookout for those 'new ways' right now. And when they're found, the wax lab can be counted on to make sure they work.
and in St. Constant **WAX BECOMES LIGHT**

St. Constant, Que., is a tiny hamlet with a population of 450 on the south shore of the St. Lawrence about 30 miles southwest of Montreal. It was here in 1896 that Frédéric Ballariguen had an idea. He was standing beside the railway tracks at the time, watching boxcars full of candles rumbling north to Montreal. The candles were all in wooden crates and the wooden crates were all marked 'Made in U.S.A.' Why not, Frédéric asked himself, make candles here—in St. Constant? Surely the French Canadian churches, which were the biggest customers, would prefer to buy their candles from a French Canadian candlemaker? So Frédéric set himself up in a tiny wooden shed in St. Constant, and F. Ballariguen Ltd. was born.

Old Frédéric is gone now, but if he could revisit St. Constant he'd see a lot of changes. The original one-man operation has mushroomed into an enterprise that employs 70 St. Constantians full time, and produces 80 per cent of all the candles made in Canada. A three-story red-brick factory has replaced the original wooden shed where Frédéric melted his wax in wooden kettles. The kettles are gone too, replaced by six massive concrete vats, each of which can hold 3,000 pounds of wax. The wax is pumped directly into the vats from tank trucks that deliver it (in liquid form) from Imperial Oil's Sarnia plant.

The vats are heated with coils and the contents of each vat is colored and mixed for whatever type of candle is in production. But old Frédéric would recognize some parts of the operation. The smell for instance—a combination of beeswax, paraffin and other additives that suggest now-mown hay. And the antique machines that are still occasionally used to lower a frame holding up to 120 wicks into a bath of liquid wax. This is the 'hand dipping' method of candle making. The company also makes molded candles by pouring liquid wax into molds with shapes other than the conventional taper. When the wax hardens, wicks are inserted by 'dipping' the candles with a long thin, heated rod.

When Frédéric started the business his biggest customer was the church and over the years the company has produced a great variety of liturgical candles ranging from stubby votive candles in glass jars to huge and elegant Easter candles, some more than five feet high. Today the company manufactures over 800 varieties of religious candles, but these account for only 30 per cent of the business. The rest of the business comes from 'commercial' candles. That's you and me. Candies started to regain public popularity about 1945, as dinner by candlelight came into vogue. Candlemakers responded by making candies in all sorts of decorative colors and shapes—even with aromas. The public demand still shows no sign of slackening and last year the Ballariguen catalogue listed 2,500 different varieties of candles.

Today, the Ballariguen operation is a mixture of modern technology and old-fashioned hand craftsmanship. Hand-dipped candles are still produced as they were in Frédéric's time, but the company also has a new mass-production dipping machine called the tower dipper. It's a complex three-story-high machine that is capable of dipping up to 12 'frames' of candles at once. Each frame holds 120 wicks, so the machine can make more than 5,000 candles at a time.

Old Frédéric never saw anything like that.
Lower Education

Why all the fuss about school for 3½-year-olds?
What good does it do them?

by Jocelyn Dingman

DRAWINGS BY PAT CUPLES

Are small children happy creatures of nature, who should be allowed to have a happy carefree childhood at home till school age? Or are they creatures of complex intelligence who need and want a lot of intellectual stimulation?

A lot of people tend to the second view, and among them some feel so strongly about it that they are prepared to spend $495 a year in tuition to send a four-year-old to a half-day program at a school like the Toronto French School—more than it costs for a first year in the University of Toronto's faculty of arts. And a lot of other people, who incline to a middle view, take for granted that of course a child should go to nursery school.

All this fuss over three-year-olds who can't even tie their own shoes? I've spent a fair amount of time observing the nursery school movement, and 50 years ago I could have written a nice straightforward piece on how parents sent their children to nursery school to promote their social development. Four or five years ago, I wrote about how educated parents were becoming anxious to give their children more intellectual stimulation than they could get at home, and were finding experimental schools right and left. Now the whole subject seems more complex to me. Recently my 10-year-old daughter, a product of the Institute of Child Study, one of Canada's most prestigious nursery schools, said to me: 'What's the point of nursery school—you don't learn anything.' Bright as she is, she obviously hasn't learned a darn thing about child development.

Actually there are a lot of good reasons for sending a child to nursery school. Some are serious, and some are frivolous, and I'm not sure the frivolous ones aren't just as valid as the others. I put the question to the nursery school for 3½-year-olds at the Downtown YMCA. She laughed. Where else could you get the satisfaction of being able to say your four-year-olds speaks fluent French, she said. 'I think it's worth every cent.' (A less frivolous reason, of course, is the belief that the preschool years are the ideal time to learn language.)

One good reason is that three- and four-year-olds need more social companionship than the average home can supply. People who are lucky enough to live in a neighborhood where there are a lot of small children aren't so likely to send their kids to nursery school. But in all neighborhoods, in the Canadian climate, many of the small children are cooped up half the winter with colds, and it's often difficult for them to find somebody to play with. Mothers who have to do housework and shopping and look after other children don't always have the time and patience to supervise small children at play so that they can learn better ways of getting on with each other than pushing and shoving. Shy children, who take forever to learn to play with a new child, have time at nursery school
to sit on the edges, watching until they are ready to join the group.

One mother I know said she didn’t even know there were nursery schools when her first child was young, and that he was bored stiff until he went to kindergarten. Her second one was bored stiff too, but she got him to the French School at the age of four, and he came home very pleased with himself, and full of new ideas. ‘I think they need to be with each other and do their little ring dances or whatever it is they do,’ she says.

And nursery schools can do a lot for parents, too. There are a lot of co-operative nursery schools in Canada where the parents help run the school and work with the teacher part-time. Cathy Knes, who helped start the Rochdale nursery school in Toronto, and is now organizing another one, told me she would have pushed her daughter through the nursery school, but she took him. By the time her son Jamie was eighteen months old, it was that he needed to play with other children. ‘I’d been highly educated,’ she said, ‘but not to be a mother. It doesn’t come naturally, and there were a lot of things I was stymied by. Every time I made a mistake, I felt threatened.’ When she could share her problems with other adults who knew Jamie, and her younger daughter Rebecca, it made things easier.

A child at home, she points out, has only two adults as models. In a co-op nursery, he meets a lot of different grown-ups with whom he can have a more friendly, relaxed relationship than he can with his parents. And some of the advantages apply to any good nursery school.

‘It’s fantastic for the child’s ego,’ she told me, and when she said that I recalled Margaret Fletcher, who used to run the nursery school at the Institute of Child Study, remarking that she thought going to nursery school made little children feel important. A nursery school is a child-sized world—everything is scaled down. There’s almost nothing that is dangerous, so you don’t have to be saying No all the time, and there’s a far wider variety of good materials and things than the best house can provide. For example, one of the resources at the Institute of Child Study’s art class is 100 pounds of wax donated by Imperial Oil. The children use it to make hats, carve into statues, and melt into over twice foams.

Helene Connay points out that nursery school gives a different kind of stimulation than the child gets at home. For instance, he might go outside, going with your mother to the park, and go on a nature walk with a lot of other people. There are probably endless hours of exciting discoveries in nursery school that they would never experience outside it.

In fact, does a child find in a good co-op nursery school, or in a school that encourages close contact between home and school, as Helene Connay does? Elizabeth Vaught, who runs one of the better co-op nursery schools in Canada, has put it this way: ‘For a child of four, in a class of 20, it means he can never be quite overlooked, with four adults instead of one interested in his welfare. It means his mother (or father, grandmother or aunt) is there on a regular basis, and can really understand about his friends, his excitement over the baby, the way he plays and shares his way to the sugar bowl, and talk about it all with him. He sees that adults are learning to get along together, and each one is different, still worthwhile.

He has a lap when he needs it, a listening ear. He shares the excitement of the aeroplane that Maro’s done, or the puzzle, or just running a preschool project at the Harvard School of Education, has one of those “cooperative learning” groups, with no prescriptions of anything, but the work goes on. The idea is that Maro’s done in nursery school.

She means that nursery school is a middle-class parent’s way of being so busy with their own children’s school, does preschool education give a child a head start so that when he gets to regular school his intellectual development isn’t ahead of other children?

One should first consider the middle-class parent’s relationship to his own children’s schooling. Does preschool education give a child a head start so that when he gets to regular school his intellectual development isn’t ahead of other children?

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The Montessori system is based on the theories of Maria Montessori, an Italian doctor, who worked with dums children in Rome about 60 years ago. She discovered that these children, whom many people thought were retarded (today we would call them ‘culturally deprived’), could be taught many things at an earlier age than many people thought. The Montessori system has become popular and there are schools using this system.
Farewell to Splendor

They’re tearing down the gorgeous old movie palaces (sob) and building efficient little cinemas instead.

by William McCarthy  PHOTOS BY CROMBE McNEILL

The most gorgeously ornate movie theater in Canada—the Capitol in Ottawa—has been torn down, and I’m sorry. I have never set foot in the place but I’ve been in others like it: palaces of vicarious pleasure that were to people of my generation what the psychedelic scene is to young people today.

One by one, these pinacules of flamboyant design are vanishing: in less than a decade, more than 100 have fallen victim to the wrecker’s hammer. A similar fate awaits the Lyceum in Winnipeg and the theaters in Victoria, Regina, Edmonton and Quebec—all named the Capitol.

Before they’re all gone, I’d like to make a few final comments about what they used to mean to a person hooked on the heavy burden of their marvelous interior design.

Many of my happiest hours were spent in the semi-gloom of this grandeur, fake though it may have been. Throughout high school, I was an usher. I worked at neighborhood theaters and the biggest prestige houses downtown.

While other depression kids delivered groceries on their bikes or sat around the park, I was surrounded by “art.” Period furniture and heroic statuary became as familiar to me as comic books were to my contemporaries.

At a very early age I learned to dress for an occasion. Six nights a week (and the nightmare of Saturday matinées) I was as formally attired as a guards officer at a state dinner. I had to: I was part of the show.

The decor was another part. If it was gaudy, it was also

The old Capitol Theater in Ottawa. All the marble and mirrors may have been part of the sales pitch but their magnificence was breath-taking.
Massive chandeliers hung over stairways of imported marble that rose to balconies curving away in great sweeping arcs.
Details from the ceiling of the Capitol:
an amalgam of museum, cathedral and boudoir
that was the essence of the period

heroic. Unity of theme wasn’t an overriding consideration; if ancient marble in columns was good, a mixture of
Gothic armor and Renaissance chairs only made it better. It was interior design gone grandioser—an entrance
lobby based on the Hall of Mirrors in Versailles might lead into a vaulted auditorium decorated in the manner of
the Sistine Chapel.

The designers weren’t trying to elevate our minds, of
course: their motives were purely commercial. They gave
us an amalgam of museum, cathedral and boudoir that
came the essence of the period.

And something else. In those days the theater itself
was an experience—going to a movie in the 1930s was
total experience 40 years ahead of its time.

It made us eager to suspend disbelief. Take, for
example, the magnificent Capitol in Ottawa. All the
marble and mirrors may have been part of the sales pitch,
but their magnificence was breath-taking.

The Capitol had the serene confidence of the ultimate
splendor. Massive chandeliers, once common even in
local houses, hung over stairways of imported marble
that rose to balconies curving away in great sweeping
arcs around the lobby.

To climb such a stairway, if only to catch a quick puff
during the trailers, was a dramatic, even triumphant
experience. In a theater like the Capitol on a stairway like
that, you could actually be Rothschild or Osraelli or Du
Barry for a moment in fantasy.

This may be part of the reason why so many people in
Ottawa suggested that the theater be saved as a historic
landmark, but there was never much chance of that
happening. The Capitol had 2,350 seats—far more than a
manager can count on filling for a film’s run these days—and
there was enough space in its inner and outer
lobbies for another complete theater. It had even been
suggested that the theater be turned into a gambling
casino (manager Jack Critchley says the marble staircase
and crystal chandelier would have provided the perfect
setting) complete with a first-class restaurant and an
intimate cinema seating about 200.

The furnishings that made the Capitol the splendid
place that it was were partly responsible for its demise.
The nine-tier crystal chandelier took four people half a day
to clean every three months—they lowered it on a hand
winch to get at it. The marbles, panelling and upholstery
required a cleaning staff of eight.

But even if the economics of the movie business killed

When the Capitol opened in 1920 the best seats
in the logs were 55 cents. The feature film was
The Love Flower, but the theater was the star

the Capitol, its splendors will live on in the hands of
collectors. ‘You’d be amazed at the number of calls I get
from people wanting to buy the stuff now,’ the manager
said last January. ‘I’ve had offers about the old organ,
the marble staircase, the furniture—you name it.’

Fifty years ago, when everything was brand new, the
same staircase welcomed what the Ottawa Citizen called
‘the greatest aggregation of screen and theatrical
celebrities ever assembled at one time, not only in Canada
but on the North American continent’ for the theater’s
opening on Nov. 8, 1920. The best seats in the logs
were 55 cents then, including tax, and the feature was
The Love Flower, with Richard Barthelmess and Carol
Dempster. But the theater itself was the star. A report in
the paper, made dreamy by the writer’s use of the
passive voice, wafts the reader through an article
sprinkled with words like ‘gorgeously,’ ‘graceful,’
‘beautiful,’ ‘brilliant,’ and ‘dignified.’ The colors were rich
rose, Pompeian green, Wedgwood blue, ivory and gold.
Wow! That kind of atmosphere was a bonus that went
with the price of admission and we absorbed it through
the skin. Gleaming brass and rich brocade, carvings of nymphs
and cupids and not a straight line in sight—it was all part of
the bigger picture.

And we were in it.

Even if we had known, it wouldn’t have mattered that
most of those seemingly priceless objetos d’art surround-
ing the audience had been mass-produced, many by the
Belgian Art Studio of New York, to give theaters class.
The studio is still in the business of decorating theaters,
but it works out of Toronto now instead of New York.

But whether the result was classy or not, the old movie
house did have a warmth and a sense of occasion
foreign to the austere functionalism of today’s theaters.
And it is said to see them go. When these old theaters
go, they take something marvelous with them—they may
have been fake, but they were also big and fancy and
full of fun. ☺
THE RETURN OF THE ANIMALS

As people move to the cities, animals that were once thought extinct are showing up again. New ones are appearing, too

At eight o'clock on the sunny morning of Aug. 9, 1969, farmer Alex de Volk of the Indian Head district, 40 miles east of Regina, was on his tractor, disking a tract of Saskatchewan's typical rolling, fallow land that fell toward a coulee. He gradually worked over to a small slough where the only cover was tall grass.

Suddenly the grass parted. A brownish animal ran out, just 35 feet ahead of his machine, and bounded up a small rise. It was a mountain lion. The startled farmer watched open-mouthed as the big cat crossed the disked area and disappeared into standing grain 300 feet away. Just as he started the tractor again another cougar sprung up the slope and followed the first one into the wheat.

"At first I thought it was a coyote," de Volk said, "but then I recognized the big, round, cat head and the long, thin tail, with its dark tip. The run is very different. Too-long, slow, smooth leaps—not at all like a fox or coyote."

He passed on the news to the local game warden and an RCMP constable, who came to examine the tracks. They organised a hunt and surrounded a large poplar bluff where the undergrowth was very thick. De Volk and Bob Young, a crack deer hunter, went to one side and hid toward the rest of the party. Suddenly they sighted the cat, just 20 feet away. Two animals moved off so fast no one had time to shoot.

How did he feel when he saw the cougars? "Not very brave," de Volk said. "My hair stood straight up and we all were scared when we spoke to them in the bush."

Two months earlier, and 200 miles farther north, at Snowden, Mrs. George Traub, a farmer's wife, heard a calf bawling in pain. She ran to help, thinking it was caught on barbed wire. Instead, when she reached the road, she saw a cougar chewing it. Mrs. Traub took off her jacket and waved it frantically. She yelled at the top of her lungs and the cougar bolted. The calf was living when she reached it, but so badly mauled it had to be destroyed.

Next day her 19-year-old son, Harry, who had shot a cougar in B.C. just a few weeks earlier, and Pete Olson, a friend, went hunting the cat. A deer ran into the bush and Olson followed to flush it out. "I almost fell over," Harry reported. "A great cougar came bounding out instead. I just stood and stared... too surprised to shoot." Both the Traubs and the Olsons saw the cat twice again, and they found rob tracks beside the large oozes. They believe it was a female with a den not far away.
The last week of April, 1970, Walter Johnstone, a commercial pilot from Canol River, was flying over the Pasquia Hills, a wilderness area 80 miles east of Saskatoon. He noticed a herd of deer stampeding; when he dropped lower he saw they were being stalked by a cougar, intent on a good meal.

These encounters with the sleek, powerful cat are the most recent of at least 200 sightings in Saskatchewan. Once, by Nick Fuchs of LloyDMINSTER, goes back to 1931. Fuchs is a retired trapper, a tanner, and creator of the striking wildlife exhibit that forms part of the city’s Bar Colony Museum. Most of the cougar episodes, however, have taken place in the last decade. They have come to light because of one man’s hobby: tracking down evidence that cougars (thought by some naturalists never to have lived in Saskatchewan) and grizzly bears (believed to have been extint in the province for 70 years) are indeed alive and making a come-back.

The man is Tom White, a Welsh architect who settled in Regina 11 years ago. On their first weekend in the city he and his wife explored Wascana Creek, which winds into the artificial lake that is Regina’s special pride.

Following the creek out beyond the city, they were amazed to catch a glimpse of a buck and three does standing not far from a road. It seemed incredible to them that game animals like these could be so close to a heavily-populated area. These unexpected sightings sent White off to the Museum of Natural History, where specimens of the province’s varied and abundant wildlife are displayed (‘A Guide to Saskatchewan Mammals’, by W. H. Beck, lists 105 species). White had never seen these creatures before, except in pictures, and they intrigued him. He was particularly attracted by the tawny, handsome cat, known to so many names - cougar, panther, puma, catamount, painter and mountain lion.

He joined the Natural History Society and the Wildlife League and went on various expeditions. He also learned to hunt. With beginner’s luck, he bagged two black bears in his first season. As his knowledge of animals and their ways increased, his interest grew, especially in the cougar, which nobody he met had ever seen.

At a Christmas party in 1960 he met a lawyer who gave him his first cougar story. The setting was the Pasquia Hills, 350 miles northeast of Regina, where the museum’s specimen had been caught. Were there any more up there? White wondered. He decided to find out.

Historically, there are records of the cougar as a rarely-seen animal that makes its home in almost every part of North and South America—hence its many names.

British Columbia is prime cougar country and the animal is well known in the Alberta mountains. Bruce Wright, an eminent biologist in New Brunswick, has recently established its renaissance in the Maritimes. Quebec, Ontario and Manitoba have reported mountain lions. Saskatchewan, however, was thought to be outside its range.

That assumption was challenged more than 20 years ago when trapper Joe Fournier, who runs an Exxon station at Canoe River, on the edge of the Pasquia Hills, caught a cougar in a trap and gave it to the Regina Museum in 1944.

White’s first step was to visit Fournier. The trapper told him about the catch and provided some significant detail. While the cougar was in the trap it was visited by another. Fournier added that, over the years, he has occasionally seen more cougar tracks.

Spurred by what he had heard, White turned cougar detective in his spare time. He contacted conservation officers, game wardens, farmers—anyone who could document a cougar encounter. They spread the word of his interest. Unexpected stories began to reach him. Snow sightings were brief; some were accounts of sustained contacts with the shadowy beast.

In 1955, Walter Rombarg of Greenwater Lake, between Regina and Saskatoon, found a dead calf with head and haunches slashed. That night the dead animal was dragged 40 yards into the bush and partially covered with leaves. Rombarg thought the kill was the work of a bear and organized a moonlight hunt. Instead of the animal they expected to find, the hunters saw a great, moon-silvered cat gliding through the trees.

Five years later another cougar appeared when the Rombarg’s were returning at dusk from an outing. They heard what sounded like a baby crying in pain—a typical cougar cry. The dogs began to bark but wouldn’t go forward. Mrs. Rombarg showed her flashlight; it revealed a large cat, four to five feet long, with a very long tail. The next summer, Rombarg’s attention was arrested by frantic barking. He went over to the bush to investigate and caught sight of a cougar.

Such stories have convinced Tom White that his fascinating animal is not strange or transient, but a genuine native. He believes that in the wooded hills on the Manitoba-Saskatchewan border and in the labyrinth of creeks and coulans, east of the Cypress Hills in the southwest corner of the province, a very few of these striking predators have always existed, and that in the last 20 years their numbers have increased.

The cause? White answers in one word—food.

The cougar lives, when he can get them, on deer. Since the late 1930s Saskatchewan has had deer in great numbers; the present estimate is 500,000. Though they have always been in the province, their relative abundance is partly a result of game management programs in eastern Canada and the United States. Wildlife professionals like zoologist H. S. Malegaard and Lyle Lensen, the superintendent of Buffalo Pound Provincial Park a few miles northwest of Moose Jaw, confirm White’s statement that, as their territory became overcrowded and food scarce, deer moved north and west. Lensen says that as a boy at Vanscoy, near Saskatoon, he scarcely ever saw a deer. Now they abound all over the southern and central parts of the province.

The prairie grasslands, flat and treeless as they seem, are littered with cougars and pheasant bluffs that provide both shelter and food for deer. By the mid-1930s drought and depression had emptied many farms, so deer were able to range widely. Drought was followed by war and hunting fell off. After the war, the big, mechanized farms, operated from town, increasingly became the pattern.

Plains grizzlies have been seen in the Pasquia Hills of Saskatchewan for the first time in 70 years.
With little to threaten them, deer flourished and the cougars, driven by their abundance, ceased to the banquet. So did the lynx and the bobcats, though they are more interested in rabbits, which are also very plentiful just now.

Tom White accounts for the current wealth of wildlife with the maxim: 'Nature abhors a vacuum.' He continues: 'As the human presence diminishes, animals take over.' Douglas Gilroy, one of Saskatchewan's best known naturalists, is in agreement, though he hasn't documented the theory. 'It just seems the natural thing for them to do,' Gilroy says.

Leith Knight, the author of a book on birds of central Saskatchewan, is more specific. The Knights own a farm about 35 miles northwest of Moose Jaw at Rowletta, which they operate from their home in the city. Mrs. Knight reports that deer are often on their property, that kilders nest in the front lawn and goffers hold conventions in their barnyard. With goffers plentiful, hawks and short-eared owls abound. 'None of this would happen if we lived there,' Mrs. Knight says. 'The power mower would drive away the kilder, dogs would scare off the goffer and the deer would be afraid of us.'

Dr. Stuart Houston of Saskatoon, an expert on birds of prey—last year he banded 667 swallow-thinks White's 'vacuum' theory is only one factor among several necessary to explain the increased number of animals. He cites food supply and freedom from pesticides as two others. He adds, however: 'We've had a number of instances of great horned owls nesting in shelter belts after the farmer moved. In 1969 we found two peregrine falcons in one and a great horned owl in a deserted house filled with grain.'

Douglas Pegg, a conservation officer with Saskatchewan's department of natural resources, reports a marked increase in the animals that prey on rodents—mice, badgers and skunks. (Mice and voles are almost epidemic in the southern parts of the province.) The red fox is multiplying too, and the coyote would be, since both these animals are rodent eaters, but the coyote has been declining because of poison bait. Occasionally both coyote and fox will steal domestic fowl, which makes them unpopular with farmers. 'Fox aren't much affected by the bait. They're just too smart,' Lyde Lensen says with a grin.

C. B. Forbes, director of wildlife for the province, and H. S. Mailepaard, his associate, don't think overpopulation is the cause of the current explosion of creatures. They credit intelligent game management for much of it, and cite a 27.8 per cent increase in antelope, a 10-year-high harvest of Canada geese (95,042 birds) as examples, but they do agree with White that ample food is the magic ingredient. Hence the cougar's appearance on the scene.

In a decade of investigation, Tom White has become quite an authority on cougars. He knows their habits and their history, and his life grows steadily thicker, but he has yet, personally, to meet the graceful,207 licking cat. He has, however, seen and photographed its tracks.

White discovered two sets in the Pasqua Hills in 1964, and another two sets in Prince Albert National Park. He made casts, photographed them, and sent the pictures to Bruce Wright, director of Northeastern Wildlife Station in Fredericton, for positive identification. Wright replied: 'Your pictures are excellent ... and leave no doubt in my mind that they are cougars ...'

White possesses four more sets, also verified, that were photographed by others in various parts of southern Saskatchewan.

At his cougar data accumulates, White keeps an ear cocked for news of the plains grizzly bear. On various trips to the Pasqua Hills he has picked up information about these big, hump-shouldered animals with the great head of silvery-tipped fur. Indians from the Red Earth reservation on the edge of the Pasqua Hills spoke of them. White was told by various trappers and many rangers about a fire ranger at Wildcat Hill tower in the area's highest point, who was bedeviled in his cabin for three days by an enormous bear. Spurred by these stories, the plains grizzly has become White's second serious study.

Long before what are now Saskatchewan and Montana were inhabited, this awkward-looking, lumbering bear was common. Lewis and Clarke, the explorers, wrote of seeing as many as 12 in one day. The grizzlies followed the buffalo on whom they preyed, and disappeared with them.

The bears were thought to be extinct until one was shot by a diminutive Indian woman named Bella Tarn in 1935 in the Swan Hills area of northwestern Alberta. She killed the half-ton animal with a .22 rifle, and it turned out to be the biggest grizzly ever reported. (Two larger grizzlies have since been shot in British Columbia.) Oil was discovered in the area a few years later and there were news that the bears would be killed off by hunters using the oil roads to penetrate the hills. But government regulations closed the oil fields, and the lumberjacks and deer herds found a new and thriving occupation: the grizzly bears survived, and in 1968 the area was re-opened to grizzly hunters. Until recently it was thought they were the last remnants of their kind.

But the grizzlies are still around,' White declares. 'A few at least, roam the hills, where people are scarce and food abundant. Trappers and game wardens now use snowmobiles to cover their territory, so they're in the brush much less.' In the absence of men, White believes, the bears establish themselves where they are not disturbed.

White's first solid clue that plains grizzlies still existed came in Feb., 1970. It was a grizzly footprint, discovered by a geologist up in the Pasquias. He photographed it and gave the picture to White, who sent it to Yorke Edwards, the staff specialist, Conservation Interpretation, Canadian Wildlife Service, Ottawa.

Mr. Edwards confirmed it. 'The track in the picture does appear to be that of a grizzly. The possibility of a plains grizzly being in the Pasqua Hills is exciting news.'

In late April, White got the real break-through. He went to the Pasqua Hills to see trapper Lloyd Stonehouse, who told him: 'Sure, there are grizzlies here—and he produced a snapshot of himself standing beside one he'd killed in 1954. He loaned the picture to White, who sent it to Ottawa where Yorke Edwards verified it.

With the shadowy cougar established as a bona fide presence and the grizzly on the way to that status, what animal will be uncovered next? There are two possibilities.

One is the swift or kit fox, a tiny predator, once common. The other is the great, gray timber wolf known in the west as the lobo. It hunted the buffalo as the grizzly did, and like the lobo is thought to have disappeared.

White has done some studying about the timber wolf with promising results. Ranchers in the Cypress Hills have heard its howl for the first time in 50 years. Cattlemen in Val Marie, north of Swift Current claim to have seen it; the University of Montana recently examined a specimen it believes to be a lobo.

White says: 'The widespread increase in deer indicates how animal populations can expand when conditions allow. Deer, in times past, provided a staple food for wolves. Current reports encourage the belief that the lobo will return permanently.'
Tenting on the Tundra

How twelve men went looking for a nickel mine in Ungava and found peace, solitude and fabulous fishing

by Arthur Black  
PHOTOS BY RON COLE

If you climb a hill near Lac Laliberté on a clear day, you can see icebergs on Ungava Bay. Lac Laliberté is a long, deep, crystal-clear lake abounding with trout, splake, arctic char and grayling. It's 85 miles farther north than Fort Chimo, and it's cold. Even in August there are snow patches lying around the shores. Snow patches, rock, lichen and five tents belonging to Imperial Oil's Hopes Advance project. The name comes from a large nearby inlet on Ungava Bay.

What's Imperial Oil doing in a place like this? Prospecting, that's what. Lac Laliberté lies in the middle of a long geological formation known as the Labrador Trough. The trough is a huge swath of ancient rock about 600 miles long and rarely more than 45 miles wide. It stretches from the northwest corner of Ungava Bay through iron-rich Schefferville and Wabush in Labrador. But the Imperial expedition is looking for copper and nickel, not iron. Preliminary surveys and prospectors' reports indicate that the ore is there. The expedition hopes to find out if there is enough to justify a full-scale mining operation.

Last August there was only one way to get into the camp: by bush plane from Fort Chimo. The country is wilderness; after you leave Fort Chimo and head north, you see no sign of man from horizon to horizon. No buildings, no roads, no power lines—not even trees, for Fort Chimo’s wispy, straited pines mark the northern limit of the treeline. There is no sign of animals either. Only a yellow-green, gendly-undulating carpet of lichen, moss and
rock, packed by waterholes of every size and shape. After a few minutes in the air it's impossible to tell whether you're flying over a large lake at 500 feet or a small bog at 50 feet.

Suddenly the pilot shouts something that is drowned in the roar of the engine and jerks his thumb to port. He thewes the plane into a shuddering left bank and there's the camp. Five brightly-colored tents—two blue and three orange—blooming at the foot of a long lake. The plane lands on the water and taxis up to a makeshift dock of splinters. A small ridge hides the camp from the lake so that only the dock and a freight canoe hauled up on shore indicate the presence of men. The pilot cuts the engine and but for the wind, everything is silent. Not a sign of anyone. Then a woolly head pokes over the ridge. Then another, and another. Hair and beard, nearly hidden in great lumpy duffel coats, the men scramble down the ridge.

First to reach the plane is Ray Van Tassell, a student at the Provincial Institute of Mining in Haileybury, Ont., who spent last summer working for Imperial. Sporting a totally-unshaven, two-month rug of hair and bushy beard, he peers into the baggage compartment. "What?" he yells in mock disappointment, "No barber?"

The men have been suffering through their third neurotic two-way radio of the season. The first two never really functioned properly, and the latest one, though unreliable, gives them fleeting contact with Fort Chimo for weather reports as well as contact with the charter airline. But even when the radio is working, incoming messages sound like a parody of human speech against a background of static, whistles and crackles. So when the men hear the roar of a bush plane coming in, they all hustle down to the beach with uncontrolled joy. The plane brings them food, supplies, a different face and mail from home.

Twelve men live in three tents at the Lac Laiberté camp (the two additional tents serve as cookhouse and field laboratory). There are two geologists, three geophysicists, one cook and six student 'helpers' who take soil samples and assist in mapping the area. But job definitions blur rapidly in the north. The student helpers become technicians in the field lab, the cook helps build the dock. When there's work to be done,
After the day's work is done at Lac LaLibéré, the men relax as best they can in a remote camp where diversions are limited. Aside from fishing, recreational facilities are zero. The summer evenings are long, the clear weather there is enough light at midnight to read a book. One way the men devised to fill the evenings at Hopes Advance was the Lac LaLibéré Hockey League.

Every night after supper the men retire to one of the tents. A deck of cards appears, and after checking a dog-eared chart of current league standings, it's Hockey Night in Ungava. Each man represents a different NHL team, and the games are restricted to two 'teams' at a time. The game involves a good deal of slapping down cards, together with irregular explosions of 'Puck! 'Goal!' and 'He shoots... he scores!'

Monsieur in the camp was always high, and Don Black was as responsible for that as anyone. He was the camp cook. With two small propane stoves, a snow-bank for a refrigerator and no guarantee that fresh supplies would arrive within a week of when he needed them, he managed to satisfy 12 hungry men three times a day, seven days a week. He even baked fresh bread every day, not to mention such occasional treats as tarts, pies and cakes.

Once last summer the supply plane was a week overdue, leaving the camp entirely without fresh meat. 'It was marvelous,' says Spencer, a 21-year-old student from the Provincial Institute of Mining in Haileybury, Ont. 'For a whole week he gave us the same meal every night—disguised as something else. We ate canned meat and chips, canned-meat-burgers, canned meat fritters, canned meat escalope, canned meat stew—name it. I don't think half the guys ever realized it was all canned meat.'

One thing Black never had to worry about was his water supply. He had a whole, uncontaminated lake full of it right at his front door. The lake water was used for cooking, drinking and washing—everything but swimming. It was just too cold for that. The men kept themselves clean with sponge baths from a pot of water kept simmering on the tent stove. They solved the problem of shaving by avoiding it. The only time they used water directly for washing were on laundry days when clothes were dipped in the lake, soaped and pounded clean with rocks in splendid pioneer fashion.

Weather is probably the biggest headache for such an expedition. At Lac LaLibéré, the days are much longer than those at home. In the summer the sun never sets. It comes in the middle of June and ends with August. The men started setting up the Hopes Advance camp on June 15, but the ice didn't go out on Lac LaLibéré until July 8. By mid-August, the great dense fog that rolls in from Ungava Bay can move in heavy, and stay for four days at a stretch, making all flights impossible. By early September the fog settles in and keeps until the ice appears. The camp was broken up by the end of August and the site abandoned until next spring. The tundra here is much more lush in summer than that of the western Arctic, and in addition to the interminable fogs and gale force winds, the men have to contend with frequent rains. Despite the fact that the tents all sit on raised wooden platforms, they were flooded twice by torrential rains in July.

What the well-dressed camper wears in this climate is heavy boots, long underwear, thick woolen sweaters and winter jeans. Ice and snow usually struggles up into the low 50's, warm gear is necessary to cut the relentless wind. But nobody complains about the weather. The longer it blows, the fewer moquines they'll see. When the wind does drop a little, the moquines rise from the tundra in thick, choking clouds and head straight for George Carascall.

George Carascall is one of the camp helpers and a biology student at the University of Waterloo during the school year. He also is a member of the ski team. A single bite will swell to the size of a vanilla hull and itch for weeks. Luckily, Carascall can get an injection to prevent this violent reaction, but he has had a booster shot every four weeks. When his arm started swelling, he invited him to a doctor in Fort Chimo.

As a biology student, Carascall is happy to talk about all aspects of flora and fauna in northern Quebec, but he'd rather you avoided the subject of fish. During the spring breakup he was standing by the lake and happened to look down into the water. Looking right back at him was the biggest lake trout he'd ever seen. 'Get the net!' he raced at Charlie Winegard, a McMaster University student. Carascall snatched up a fishing rod and winged a lure right in front of the fish's huge mouth. The trout tempted it briefly, then listlessly spat it out. Troubled, Carascall ran it past the fish again. The monster started to move in when suddenly a little trout darted in and grabbed the lure. Carascall frantically reeled in the little fish to get it off the hook and go back after the big one. Helped Charlie Winegard down to give him a hand with the landing net. Just as Winegard was netting the little trout, the big hanker took a fancy to it. Right out of the water it jumped... and right into the net. It was Winegard's fish and it weighed 28 pounds. Nobody knows what Carascall's weighed. He threw it back. This is George Carascall's first trip to the Canadian north, and he's very impressed. 'When I told some of my pals in Toronto that I had this job, they thought I was crazy. Couldn't understand why anyone would want to spend his summer way out in the backwoods like this. Their idea of a great way to pass the summer is to have a job in some hush stuffy office building in the middle of the city. What they do doesn't matter as long as they can go to a movie or a dance or something after five o'clock.' Carascall shakes his head. He has learned to love this land with its strange, rugged beauty that is so hard to define. No one has difficulty explaining the beauty of the Swiss Alps or a Mediterranean cove or an African sunset. But the tundra? This weirdly pleasing confluence of rocks and moss and water? Carascall doesn't know. 'It's just so damned beautiful.'