May

Ontario Division

1990



Nuclear chemist Malcolm Fowler hails from Los Alomos. To find out what he's doing at Creighton Mine, turn to Pages 8 and 9.



Barbecue buddies

Maintenance mechanics Kim Conrod, right, and Gerry Laframboise ham it up during the Frood-Stobie Mill annual barbecue. Cold weather and rain forced the barbecue indoors but failed to dampen the spirit of participants. For more on the mill barbecues see story and photos on Pages 4 and 5.

Inco lends financial support to survey of Sudbury Basin

Inco Limited is participating in a research program consisting of a geophysical study of the Sudbury Basin that could eventually help locate new ore resources.

A high-resolution seismic survey, to be carried out this coming winter, may provide structural information on the upper part of the earth's crust in the Sudbury region.

This will complement a seismic survey at a regional scale being carried out at the same time under the federal government's five-year multidisciplinary study of the earth's crust called Lithoprobe.

Barry Krause, Manager of Geophysics and Technical Services for Inco Exploration and Technical Services, said a local group comprised of representatives from Inco, Falconbridge and Laurentian University played a key role in obtaining the initial agreement with Lithoprobe to include the Sudbury Basin in its areas of exploration.

When Lithoprobe agreed to include Sudbury, the local group decided to promote a high resolution seismic survey.

"Lithoprobe is a very deep scientific geological study of the Sudbury Basin that will provide structural data as far underground as 20 or 30 km," said Krause. "But the areas nearer the surface will be left

"By doing the high resolution survey we hope to obtain a more detailed look at the structures nearer the surface - anywhere from 1/2 to 4 km underground."

Costs for the high resolution survey are estimated at \$190,000. Inco and Falconbridge will contribute up to



Artist at work

Lyn Goard, an Inco pensioner from the Mines Engineering Department, is also a member of the Lively Walden Art Club. For more on the club and other artistic individuals at Inco see the story and photos on Page 13.

Inco's finest vie for Mine Rescue supremacy

Being Number 1 in the Mines Rescue field is more than a question of vanity. It's a matter of life and death.

"Everybody is keyed up, eager

to go. Everybody wants to be first place," said Inco's Mines Rescue team captain Jim MacLelland, "but doing well means more than that. It tells the the people on the job that

they have some protection, that we are there and ready in case of emergencies."

Jim and his teammates were busy late last month and early June running through just about every possible mine rescue scenario in preparation for the provincial mine rescue competitions jointly hosted by Falconbridge and Inco. Eight of Ontario's mining districts were scheduled to send their best rescue people to the event last week at the Sudbury Arena.

Jim, a Crean Hill cage tender when he's not drenched in sweat underneath all the mine rescue gear, is a veteran of over a dozen district competitions and six provincial events.

He said the last time Inco led the event was in 1983 and 1984.

He said the competitions are extremely tough, the difference between a winning team and second best team being the most minor of details.

"Once you get in the mine rescue field, you don't make any obvious mistakes. You wouldn't find anyone with improperly prepared gear or poor fitting mask. Nobody makes mistakes like that. The judging always comes down to the fine points."

It's the minor details that more than three weeks of rehearsing were designed to catch during exercises in a makeshift "mine" on the floor of the Copper Cliff Curling Club. Jim said miners see Mine Res-

cue in the same light as people outside the mining industry see firemen. "They rely on mine rescue," he said. "They know that they are capable and ready to help if anyone gets into trouble."

Despite the fact that mine rescue membership is on a voluntary basis, there isn't enough room on Inco's teams for all those applying for the sometimes risky job.

"I think that's a good indication of how people view mine rescue. At \$25 extra a week on their pay cheques, it certainly isn't the money.

"Nobody wants to see anyone get hurt," he said. "Inco's mine rescue teams haven't been called out to a seriotis incident for some time. I figure that's due to the skill of our people and Inco's safety standards and procedures."

Competitions include not only such things as First Aid, fire fighting and basic mining conditions and techniques, but written examinations as well.

"It's usually about two hours on the floor, and you have one shot at it. Everybody has to get it right the first time."



Inco's Mine Rescue team spent three weeks rehearsing for the provincial Mine Rescue competitions at the Sudbury Arena last week. From left (rear) are Jim MacLellan, Rick Blum, Brian Vallier, Randy Naponse, Bill Peacock and (seated) Briefing Officer Hugh Currie, Leo Paul Seguin, and Team Technician Maurice Sanche.



Mike Demers, an electrical leader with Inco Construction, took a turn behind the microphone to promote home safety.

Radio ads stress home safety

Inco voices on the airwaves

During May, Safety Month at Inco, the slogan has been "Carry Safety Home."

Helping stress the importance of off-the-job safety, employees have pitched in as radio announcers — lending their voices and personal safety slogans to our local advertising campaign.

Mike Demers is no stranger to Triangle pages. This time, we caught him taping a radio commercial.

When Mike says, "Don't use power tools with frayed cords," people should listen. An electrical leader with the Inco Construction department, he knows what he's talking about. And, his 21 years' service have given him the experience to back up his words.

Choosing from the ranks

Mike and the other 'announcers for a day' agree that it's a good idea "to use people from the ranks" for a campaign like this. After all, those are the people with the handson experience.

By now, employees will have received their Inco/USWA key chains, and will have taken home a pamphlet entitled "Every Dog's Guide to Home Safety."

Also, employees have been shown a National Film Board video presentation that features Wally the Safety Dog. This humorous, animated treatment of a very serious subject is geting rave reviews throughout the Ontario Division.

An ambitious joint undertaking by Inco and The United Steelworkers of America, the "Carry Safety Home" campaign has been extremely well-received — and should pay big dividends, through fewer off-the-job accidents.

Slogan contest proves popular

Central Utilities thinks safety

When Maintenance Mechanic Roy Edey gets enthused about something, you really only have two choices: step aside—or get on the bandwagon.

In May, his colleagues in Central Utilities took the second choice.

Several weeks back, the department's Occupational Safety and Health (O.S.H.E.) Committee "volunteered" Edey and General Foreman Berno Wenzt as a sub-committee to come up with ideas for a Safety Month promotion.

Contest idea works

They soon came up with the notion of a safety slogan contest with a new twist.

There would actually be five

contests, one for each week of the month, and they would be open to hourly and staff employees and their families.

There would be a major, worthwhile prize for each week's best slogan — as chosen by a panel of independent judges.

Overwhelming response

Back at the O.S.H.E. Committee, agreement was unanimous, so they got busy right away with posters and entry forms.

The response?

Nothing short of incredible!

Consider a department with a total of just under 160 people, and look at the numbers:

- Week One, judges from the

Environmental Control department screened 180 entries:

 Week Two. Process Technology judges had to go through 211 suggested slogans;

— Week Three, Public Affairs had to wade through 221 entries (and it was anything but easy to choose).

Coordinating, collecting entries, and scouting for independent judges, Roy and Berno ride herd each week to make sure every slogan is reviewed, and that a fair decision is reached.

Be sure to watch for next month's Triangle coverage of the five best Central Utilities slogans — and the names of the winning contributors.



Berno Wenzl, left, and Roy Edey, slt behind an imposing stack of entries to the Central Utilities Safety Slogan Contest.

Was reviving the Triangle a good idea?



Frams Vande Weghe, Process Engineer, Smelter Complex: "I like it. I take it home and even the kids enjoy reading it. It's a good way to let your family know what you do at work. I readit, especially when there's people in it you know. As soon as it comes out and you leave it on your desk, people ask if the new Triangle is out and they go get their own."



Jerry Zanuttig, Environmental Control: 'The Triangle is good for the company and the emloyees. You get a sense of accomplishment when you see the different things being done by the company. There's good human interest stories, and you get the feeling that the employees are more than just a number."



Frank Nuxoll, auto mechanic,
Port Colborne Refinery: "I missed
the Triangle when it was away. I'd
like to see more about Port Colborne in it. Port Colborne seems to
slip by. But the magazine's interesting. For example, I'd seen a
chap's name in Sudbury that I'd
known in Saskatehewan. A champ
I went to school with but I'd lost
him over the years."



Brian Parker, support services at McCreedy: "I think so. There's always some interesting articles in it. I always find something to read. I knew that the Triangle wasn't out for a while, but these days everybody looks foreward to it. When it arrives here, it disappears from the boxes."



Jack Wessel, workman, Transportation: 'I think it was a good
idea. This is the first time I've ever
been approached by the Triangle in
25 years with the company. I go to
my party (Quarter Century) tonight.
Reading the Triangle, you get to
know the things that other people
are doing, around the company.
You read about people you've lost
touch with over the years."



Vaino Tenhunen, in-hole driller, Levack: "It was a good thing that the Triangle was revived. It's good for seeing what's happening around Inco. I'm pretty busy so I only read it occasionally, but for most, it improves morale. People feel better about where they work when they know what's going on."



Mike Oshell, mason, Maintenance: "Yes, it's a very good idea. I enjoy reading it and my family does, too. I think it's important information for a lot of people in Inco and outside. I bring one home to my father and he enjoys reading it and he's never worked at Inco. The Triangle is interesting to read, especially today, with all the changes going on."



Bert Pardy, in-hole driller, Levack: "It's a very good thing it's back in print. Inco people are getting good coverage. I like the new style. The guys think it's important to have. Most everybody picks it up when it comes out. I kind of missed it when it was cut for a while." Editor's Note: The Triangle, in its current format, was revived on a monthly basis in September of 1988. The last issue prior to that date was March/April/May 1987, while the Triangle was still being published as a magazine.



Elaine Arnold, secretary/supervisor of public affairs, Port Colborne Refinery: "I think it was a good idea. Triangle's a good way for the company to communicate with its employees. With us down here, we don't have anyone to cover our stories. The major complaint is there's not enough in Triangle about Port Colborne. I like the human interest side of Triangle. I like to read about the hobbies. Those are the things you don't really get to know about people when you meet them. They don't brag about their accomplishments. So Triangle gives Inco people another dimen-

Port members feted for 25 years with Inco.

Let us now praise the Port Colborne Relinery and its employ-

That was the simple message that Bob Browne, vice-president of the Ontario Division's milling, smelting and refining operations took to 83. Port Colborne employces and their spouses early in May.

"The Port Colborne Refinery, of course, merits a special chapter in the Inco success story, especially over the past 25 years," Browne told Port Colborne members celebrating the 40th consecutive Inco Quarter Century Club.

"From its origins in 1916, when Port Colborne was chosen because of its strategic closeness to prime markets, the plant has enjoyed a remarkable history as a refiner of nicket." Browne, who served as manager of the Port Colborne complex in the mid-1970s when its workforce stood at about 1,700, said many of Inco's premium productstoday, including S and R rounds and utility nickel were developed at the refinery during the employees' careers.

Milestones reached

"Since 1965, the face of the Port Colborne plant has changed dramatically. Many processes have changed, buildings have gone and trees and grass planted," he added.

In the quarter century since they'd joined the company, Port Colborne notched several milestones.

In 1968, No. 3 research station was built and later piloted Port Colborne's effluent treatment plant, the electro-cobalt process and the new precious metals plant. Today, while it remains Inco's distribution hub, Port Colborne researchers are working to improve the new smelting process at Copper Cliff as the company races to meet 1994 deadlines on cutting sulphur dioxide

In the past decade, the Sudbury-based VP said, the company has invested more than \$60 million at Port Colborne "because we recognize the importance of this operation now and in the future of our company."

"Being here tonight re-affirms our belief that Inco's greatest asset has always been its people," he told this year's new members of the prestigious Quarter Century Club.



Bob Browne, vice-president of Milling, Smelting and Refining, second from right, and Len Kowal, Port Colborne Refinery manager, welcome Janet Baggio, wife of stationary engineer 3rd class Harold Baggio, to the Quarter Century banquet.



Larry Slow, a weigher in the Yard Sharing and Shipping Department, admires his Quarter Century pin with wife Doreen.



Inco pensioner Ed Beck takes a picture of Quarter Century Club member Ton Webster and his wife Phyllis. Tom is a craneman in the Yard Sharing and Shipping Department.

Christine Pauze, of the musical duo Hewlett and Pauze, belts out a song for the newest members of the Port Colborne Quarter Century Club at the annual dinner.

Husband and wife highlight Port inductees

After 25 years of working with your spouse for the same company in the same city, guess what you talk about at home?

Nope.

Not work. Certainly not in Elaine and Jim Arnold's home by the water on Lake Erie outside Port Colborne.

"Actually, we never discuss

work because I'm in the front office and Jim's out in the research station," says Etaine, who welcomed her

Elaine, who welcomed her husband into P o r t Colborne's select circle of Quarter Century Club members early in May.

The Arnolds share a
unique distinction of being
the first husband and wife
Quarter Century Club
members from
Port Colborne.
Elaine, secretary to Port
Colborne man-

ager Len Kowal and supervisor of public affairs at the refinery, preceded Jim by five years since she joined the company in May, 1960.

"I started in the steno pool right out of school," says Elaine who orchestrated the refinery's Quarter Century party at the Club Rheingold. "I've been in the present job maybe 10 years."

Jim, a shift operator in the research station, and Elaine find they don't have the time outside work to spend discussing Inco affairs.

"We both play golf, both like to travel. We have a house on the lake that we're always working on and we boat," she said.

Communication improves

If they had to start all over again, they'd choose Inco as the place to develop their careers and along the way, they've noticed some marked

> changes in the Inco culture.

"What I have seen is the communication between the company and the union is friendly now," says Elaine.

"The communication is 100 per cent improved. As far as I'm concerned, my working for Inco has been good. It's always been interesting. l've switched jobs so much. First Aid. purchasing and certainly now, my job has a wide variety of duties."



Elaine and Jim Arnold are the first husband and wife Quarter Century Club members from Port Colborne.

Barbecued burgers still taste good



Maintenance mechanic Kim Conrod loads up on the relish during the Frood-Stobie Mill barbecue. Beside him is fellow mechanic Roger Charron.



Enjoying a break at the picnic table during the Copper Cliff Mill barbecue are maintenance mechanics, from left, Paul Beauvais, Scott Duke, Gates Rainville,



Maintenance apprentice Denis Robichaud, right, is offered a healthy helping of Henry Bielanski, foreman, center, and Rick Bailey, operating general foreman, left,

When is a cook-out not a cookout?

When a bunch of hungry mill workers refuse to let Mother Nature postpone the start of barbecue season.

Faced with an unexpected onslaught of cold, wind and rain in early May, workers at the Copper Cliff and Frood-Stobie Mills were forced to move their barbecues indoors this year. But while the sunshine and warmth may have been missing, the food, fun and friendship were in great supply.

The barbecue this year was excellent," said Frood-Stobie Mill superintendent Ralph Shore.

The annual barbecue to kick off May Safety Month is something we get unanimous positive comments on every year. The food they eat here is not something they



Maintenance mechanic Marcel Lafontaine weighs his options while choosing a soft drink at the Frood-Stobie Mill barbecue.



Maintenance mechanic Carmelo Filipone opens his hamburger wide for some extra toppings at the Copper Cliff Mill barbecue.

when you're forced to eat indoors

bring in their lunchpail."

Indeed, hungry workers were only too happy to pile up their plates with succident burgers and sandwiches served up by a number of their foremen.

The idea of the annual barbecue is to promote the Safety Month theme," said Gord Annis, process foreman at the Copper Cliff Mill.

This year the theme is home safety and with spring and sumer

coming the barbecue is symbolic of a family affair. The barbecue is ia an outdoor activity enjoyed at home, although we didn't quite make it outdoors this year.

It's also held to recognize the safety achievements of our employ-

I think everyone had a good time this year. The food was good and there was plenty of it. The only unfortunate thing was the weather.



Reagent man George Strong appears to be contemplating where to bite next during the Copper Cliff Mill barbecue.



Clem Carriere discovers that an empty pop carton makes a nifty food carrier during the Copper Cliff Mill barbecue.



Maintenance mechanic Romeo Villeneuve gives a Pepsi salute during the Frood-Stobie Mill barbecue. Seated down the table from Romeo are conveyorman Ray Lecuyer and Instrument man Richard Kirkland.



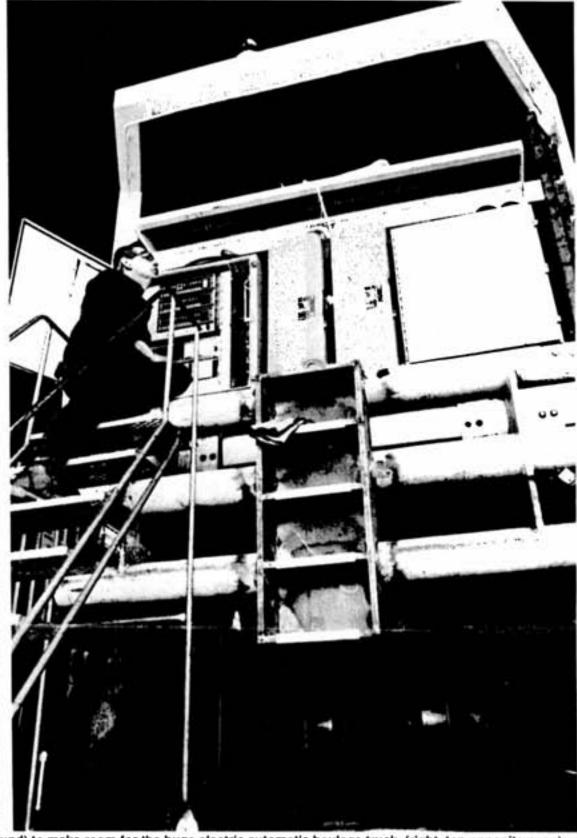
Conveyorman Tony Pawluch picks up a couple of hamburgers from chef and foreman Henry Bielanski at the Frood-Stobie Mill barbecue. Behind the two is



Shirley Allain of Continental Catering serves up a hamburger to Eliza Kallonen, cost analyst for Central Mills, during the Copper Cliff Mill barbecue. Waiting their turn behind Eliza are electrical foreman Gary Kurlicki, left, and instrument man John Dzimidowicz, right.

Mines Research keeps on truckin'





The old Little Stobie drift is dwarfed by new opening (foreground) to make room for the huge electric automatic haulage truck (right, top opposite page).

It's as big as a small house. works underground, hauls 70 tons of ore at a time, rides like a tricycle on 16 wheels, doesn't pollute, and has no driver.

It's Mines Research's new Automatic Haulage Truck, and it may the most graphic example yet of just how far mining has tunnelled from the days of the pick. shovel and sure-footed mule.

"It'll be the only one of its kind when it starts hauling ore here," said Project Planner John Larsen whose job it is to prepare a stretch of Little Stobie drift to accommodate the 45 ton colossus.

"The truck will replace a track tram, and should greatly reduce costs of the constant track and equipment maintenance."

Trucks and other vehicles aren't new in the underground environment. Underground fossil-fueled transportation, equipment and ore haulage has been used for decades. Access to many mines is made possible for smaller vehicles through ramps, a kind of downward spiralling "highway" that connects the surface to a limited number of underground levels.

One glance at the huge new

truck waiting at the Mines Research Prototype Shop at North Mine, however, and the most obvious problem becomes clear; how to get a 10 by 10 by 35-foot truck squeezed into a nine by 11-foot hole in the

To accommodate the truck, Little Stobie crews have been busy since January, 1989 widening, rerockbolting and screening about 1.350 feet of drift at the mine's 2,000-foot level. When the prototype vehicle begins underground trials sometime this year, it'll haul ore from the pass chute serving the 1,600 and 1,800 levels, creating a new main haulage level.

There are other drawbacks in operating vehicles underground besides size limitation, and the huge vehicle addresses many of them.

Air quality is a prime concern at a time when health, safety, and the environment are high on Inco's agenda, and the vehicle's electric drive climinates the exhaust problems of the traditional fossil fuelburning haulage vehicles. One smaller, 39 ton rear dump truck will also be used in the experiment. Although the smaller truck will require a driver, the standard engine will be replaced with an electric motor powered by an overhead

"No doubt about it," said John.

"Exhaust from regular trucks can create an environmental hazard underground. Although the risks are greatly reduced by underground



Research assistant Joe Cappelletti at the makeshift control station used to simulate the truck's underground operation.

ventilation systems and state-ofthe-art exhaust reduction equipment used on underground vehicles. electric power would virtually eliminate the problem.

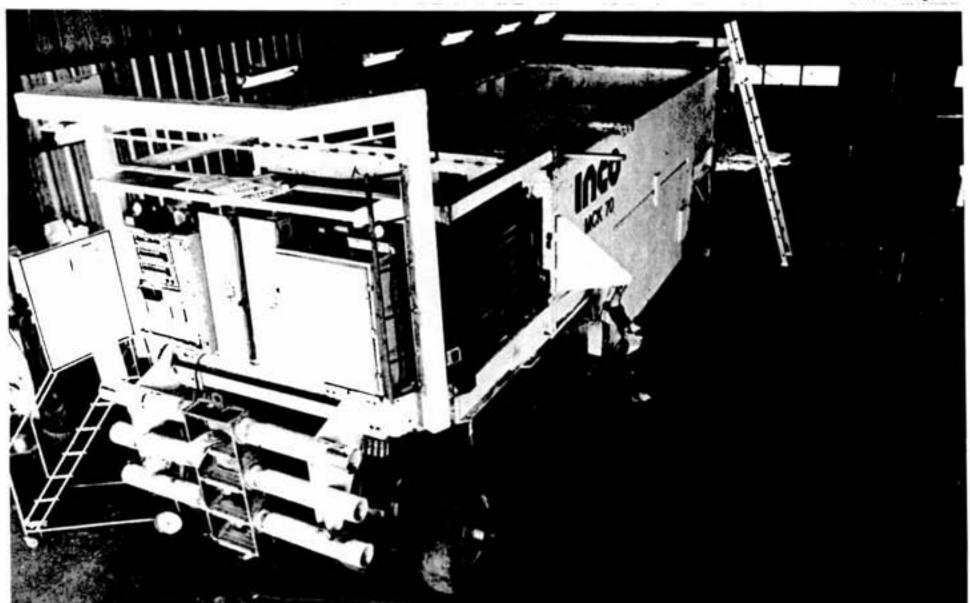
He said electric equipment runs much quieter as well, greatly reducing the noise level created by piston-driven vehicles.

Project Engineer Greg Baiden said the Automatic Haulage Truck is the first of its kind underground anywhere. Not only would it be an improvement in safety and the underground environment, but it would be more economical with its better performance and lower energy consumption. Ventilation demands for mines served by electric vehicles would also be reduced.

"What we are trying to end up with is a cleaner way of operating underground," said Greg.

The vehicle measures 35 feet long by 10 feet high and 10 feet wide. An electric motor operates a hydraulic pump which in turn feeds hydraulies to the wheels. Two independent power systems, each one providing 200 horsepower, are synchronized by a computer to make the system work.

Greg chuckles when he's asked



about any major problem that had to be overcome. "All of 'em," he said. "Making the steering system mechanism work with the computer was quite a feat. The machine has four computer controlled speeds, and keeping track of exactly where the truck was along the track at any given time also proved to be quite a problem."

Another problem unique to the project was making a suspension system work on the 16-wheel vehicle. "The computer system sees the front eight wheels as one single wheel and the rear eight wheels as two sets of four. The older system of four four-wheel sets caused the truck to behave like a table with one of its legs shorter than the other," he said. "A valve was installed to equalize the pressure, and now the vehicle rides like a tricycle,"

With initial development on the project begun five years ago, the truck began above ground trials just over a year ago and has already accumulated an impressive list of statistics. The huge vehicle has a turning radius of only 30 feet, and it has hauled a full load up a 20 per cent grade. That's almost double the performance of traditionally-powered haulage trucks.

At the same time, the vehicle can haul much more ore, "Typical underground equipment has a oneto-one ratio of payload to vehicle weight," said Greg, "This one has a .65 to one ratio."

Guided along its route by an overhead beam, the truck is muscled by 575 volts, fed by a copper track installed beside the beam.

"It's still only a prototype," he said. "It's one of a kind, and it'll have to be tried out underground before we can say just how well it works."

For Greg and others involved in the project, the work has been a chance to do something different.

"No question. Working on something like this gives people a real boost. People involved, both hourly and salaried, have been very enthusiastic. All the assembly, operation and trouble-shooting has been done using our own staff of hourly-rated PPD personnel and the design has largely been done by our own prototype shop design people."

They've done a good job, he

said, on a project that demands a lot of innovation, adaptation, and ingenuity.

How soon will the vehicle be in full operation? There's no guarantee hidden snags won't send crews back to their work stations, but Greg hopes the machine will be doing full operational haulage within two years.

Ideas and imagination are necessary tools

Workers find project 'a challenge'

George Langlois checks a hose here, a connection there with all the careful attention you would expect to see at a road race pit stop.

"Spent a few years on 'er, putting the truck's hydraulics together," said the hydraulics mechanic from behind the huge undercarriage. "It's been building, testing, checking, and redoing. It's been very interesting work, a nice project...if it works."

George's head pops out from behind one of the huge wheels of the 45 tonne Automatic Haulage Truck that towers above the other equipment in the North Mine prototype shop.

He gets high on the job. In fact, he stands almost erect at a job he often does flat on his back with other vehicles.

The Inco-designed and built electrically-powered truck is the first of its kind, designed to haul huge amounts of ore along specially-designed and equipped underground drifts.

The vehicle will be operated by computer, but the job of putting it together falls to people like George.

"It's been a challenge," he said.
"It's interesting working on something like this. You get a chance to
try new ideas. Imagination...that's
what you need when you work on
this type of thing."

A lot of new ideas, technology and innovation went into the truck as well as his hydraulics, he said, yet he hedges his bets about the end result. "I'm confident it'll work," he said with just the hint of a grin. "At least the hydraulics."

George won't say what he

thinks of driverless vehicles anymore than he would robot mechanics, "I put the hydraulics together," he said with a shrug, "but the

computer has to know what it's doing. The work's only as good as the guy....or computer that's driving it."



Hydraulics Mechanic George Langlois checks hydraulics on the Automatic Haulage Truck.



The #9 Shaft headframe towers behind a sign w. "The theory we to the Sudbury Neutrino Observatory excava

tion, and he talks of neutrino flux, solar densities and flawed

theories.

rse at Creighton Mine

Atomic Energy of Canada Limited's vice president of Physics and Health Sciences Douglas Milton said the project is a "shining example" of cooperation not only between governments, but industry, scientific and educational establishments.

AECL contributed \$300 million worth of heavy water to the experiment and Milton said Canadians must participate and contribute in basic research at the razor's edge of science.

"I hope that SNO won't be the last of the major Canadian research experiments," he said.

"It's also clear how much we owe faco for doing their part," he said. The underground site provided by faco will, according to scientists, become the most radiation-free spot on earth. Recreating such an underground site without the advantage of tapping into an existing mine site would add at last \$50 million to the cost of the project,

Inco's contribution to the project will include not only the expertise, skill and manpower to carve out of the 90-foot-high cavern, but

> sharing their "home" with guests who are expected to stick around for at least 20 years.

A major concern for Inco will be the smooth operation of both the observatory and the mine. Creighton is an operating mine, and miners and scientists will be rubbing shoulders on their way to work. Coopcration, timing and careful planning will be a must, according to mine superintendent

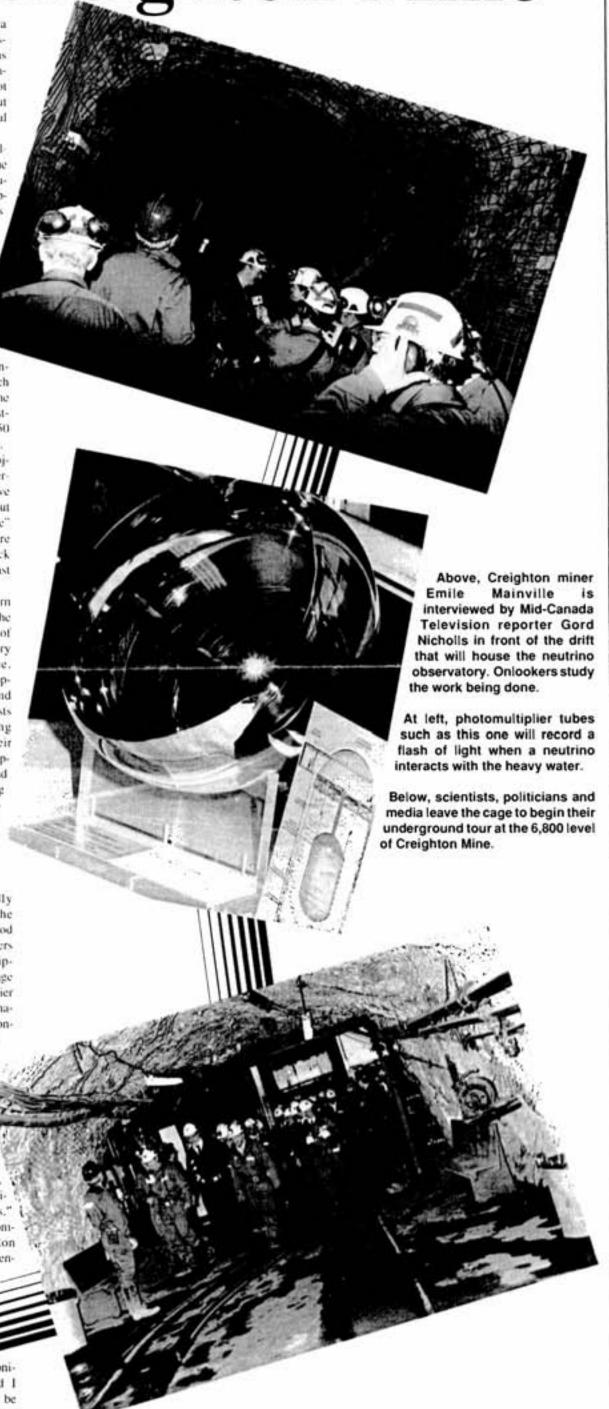
Gary MacLean.

Once built,
the facility will
be automatically
operated. But the
construction period
will demand miners
and mining equipment share the cage
with photomultiplier
tubes and other materials needed to construct the facility.

In c o will, in effect, be the elevator attendent for the duration, and there is little doubt that the job

will run smoothly. "I don't anticipate any problems." said Creighton Complex Manager Ron Aelick. "The scientists are basically dong

a monitoring job. and I relcoming guests know they'll all be ion kick-off. well trained."



In case you didn't know . . .

Sixty-seven thousand tonnes of rock occupy the space where the Sudbury Neutrino Observatory will be housed.

Two hundred trillion trillion trillion neutrinos are created at the sun's core each second.

Travelling at the speed of light, neutrinos rarely interact with matter. In fact, billions pass through a person every second, but only one or two will stop inside the body in a lifetime.

Most neutrinos would emerge unscathed after travelling through a wall of lead one light year thick.

Neutrinos are one of three basic building blocks of nature that can't be broken down any further. The other two are electrons and quarks.

There are at least three kinds (or flavors) of neutrinos. Some scientists believe that neutrinos may change from one flavor to another. SNO will be checking this.

Earth receives about 100 billion neutrinos in a square centimeter each second, mostly from our sun.

About 600 million tons of hydrogen are burned each second in the fusion processes of the sun.

The core of the sun has a density thirteen times that of lead, and a temperature of 15 million degrees Celsius.

A typical neutrino, absorbed in the heavy water of the SNO detector, will produce a light flash which will reach about 30 of the 2,000 light detectors (photo tubes.)

About 3,000 to 10,000 useful neutrino events will be measured each year in the SNO laboratory.

Neutrinos were proven to exist in experiments carried out about 30 years ago.

Exploding stars also produce neutrinos. In 1987, such a supernova led to a neutrino burst seen by two laboratories.

Neutrinos are thought to have no mass or electrical charge. In some ways they are similar to the particles in a light ray - photons.



change in sea-

son, and the folks at

Inco have packed away

curling brooms, hockey sticks and

snowmobiles and limbered up their

bowling arms.





Jeannette Dudar, wife of geologist Mike Dudar, releases her shot, urges it on and jumps for joy as the pins fly at the Field Exploration bowling tournament.

Angie has reason to be happy.

The Central Mills Employees

Angie has reason to be happy.

The trophy for the winning mill was perched within her eyesight as she spoke.

"Clarabelle won it of course."

The Central Mills Employees

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"Clarabelle won it of course."

The Central Mills Employees

The Central The Central Mills Employees

Association was off the mark quickly this year, with their sixth annual All Mills Bowling Tournament that saw almost 150 bowlers turn out.

"We always get a good turnout," said Clarabelle process clerk and association treasurer Angie Gagnon. "It was another good time."

"Clarabelle won it of course," laughed Angie.

Eight teams from each mill competed three games each. Total points were tabulated to crown the winner.

The bowling tournament is just one of a number of annual events organized to keep a little friendly competition alive between the three mills. The association hosts curl-

Just under 100 people from Field Exploration, members of the Foot and Hanging Wall Society. took to the lanes for their 11th annual bowling competition.

"It was a good get-together, like always," said Ray Parisotto, a. geological technician at Field Exploration.

The winning trophy went to the team of Robert Leroux, Bruce Lu Coderre. Donna Courchesne. Bob Martindale and Al Sauerbrei. Other prizes included bottles of wine.

Draftseman Wes Marsaw and geologist Doug Goodale organized the event...



This bowler, silhouetted against the backdrop of the lane, shows good form as he goes for the spare during the Field Exploration bowling tournament.

Danny Rodriguez, a control room operator at the Frood-Stobie Mill balances himself with his left hand while releasing the shot from his right hand during the Central Mills Employees Association bowling tournament.





Tug Parri, shift foreman at the Copper Cliff Mill, adjusts his new hat in front of Susan Benoit, Copper Cliff Mill pyro operator and chief organizer of the All Mills Bowling Tournament.



Pirkko McCauley, mill clerk at the Frood-Stobie Mill, follows through on her shot.



Clarabelle Mill maintenance mechanic Larry Talevi proudly displays his team identification.



Albert Viton, process technology operator at the Frood-Stobie Mill, is a study in concentration as he lets go a shot.



In Your Yard...

Ellen L. Heale, P.Ag.

Planning vital to landscape renovation

There are many reasons why an established landscape may require updating. Before removing and replacing any plant material or starting a construction project many factors will need to be assessed.

Renovation projects may range from an individual plant to your entire yard. They may be necessary as a result of building or construction, a change in the existing soil level, piling construction materials at the base of trees or plants damaged by vehicles or equipment. Damage may result from improper planting, stakes that scrape branches, wire or twine that is left on and girdles trunks or branches, planting leaving the containers on (whether they are plastic, fibre pots or burlap) or planting at the incorrect depth (usually too deep). Inappropriate pruning techniques, such as shearing the tops off shrubs or topping trees also causes damage. It is important to maintain the natural shape and form of the tree or shrub.

Often an established landscape will look crowded or overgrown if the wrong variety was initially chosen. The mature size of a shrub or tree must be taken into account. Diseased plants or trees damaged by vandalism may require renovation. Poplar and willow are 2 trees that have no place in residential landscaping. They are relatively short-lived species and their roots get into water and sewer lines.

Evaluation and Assessment

Your existing landscape must be thoroughly evaluated. Unique problems associated with your property cannot be solved by a generic landscape design. Follow these guidelines, you may then choose to do the work yourself or consult a professional. The first step is to sketch your existing landscape on a large sheet of graph paper. Draw it to scale $(1^- = 5^\circ)$. Before and after pictures will provide a useful reference and will chart your progress.

Next assess your existing plant material. Overall, do you like the look? List any problems associated with individual plants. Questions to be answered include - is the plant in the appropriate location, is it too wet/dry, too shady/sunny, soil too acidic, nutrient poor? This may require investigation into specific requirements. Is the plant hardy in your area or does it suffer winter dieback?

Many plants are prone to specific insect and disease problems, such as witches' broom on honeysuckle, rust on horsechestnut, aphids and blight on roses, birch leaf minor or spruce budworm. You may no longer be willing to continually try to control the problem. In that case replacement with another variety may be an alternative. One recurring concern is not taking into account the mature spread and/or height of plant material. This is especially evident with evergreen shrubs planted next to bouses or under front windows. For example, a 'Pfitzer' juniper will grow 1.2m high and spread 2m, appropriate as a "filler" in many locations. A 'Tamarix' juniper grows O.5m high and spreads lm, for use in a front shrub bed. A 'Blue Rug' juniper is a ground cover and ultimately spreads out 3m. All junipers prefer full sun. Consult your local garden centre or nursery for information on individual varieties or plants for specific locations.

Consultation is required!

Make a list of what you want to accomplish or your future needs. It is important at this stage to consult with the other members of your household. Ideas to be discussed include the need for additional privacy, screening an objectionable view, building a fence, putting an addition on your home or adding a deck or patio. If you will be selling your home, renovation and landscaping may be required to increase your property value or selling appeal.

Service areas may be required for off-street parking, storage of outdoor furniture, garbage cans, equipment and garden tools and a place for the clothesline. Look at where you will pile saltladen snow. Is the slope safe for cutting grass (it should not be steeper than 4:1). Are there plants you especially like or dislike or are allergic to? Finally, do you like to spend time in your yard, gardening and doing maintenance or would you just like it to "look nice" and be low-maintenance.

The next step in the renovation process is to assess your existing plant material on an individual basis. Is it in good condition, does it need to be moved, can it be rescued or should it be replaced? In your assessment consider if the plant is prone to insect or disease problems, is it overgrown, been improperly pruned or has it become a safety hazard? Short-lived, damaged trees may not be worth saving. One basic rule of pruning is to remove all dead, damaged or diseased plant material. To determine if a branch is dead carefully scratch the bark with your thumbnail, if it is green underneath the plant is still living. Proper pruning techniques are outlined in an Ontario Ministry of Agriculture and Food Publication #483 on Pruning Ornamentals. Rejuvenative pruning may be done over a 1 to 3 year period depending on the variety and size of shrub or tree.

Developing a plan is very important. This includes an actual sketch or design on paper and a schedule of activities related to removal and installation of plant material and construction features. Be realistic, take into account the time available to do the work, the amount of energy required (family and friends willing to help?) and your budget. Plan to do your renovation work in stages, perhaps over a 3 to 5 year period. Considerations in designing landscape features are exposure to strong winds, direct sun or deep shade, snow build-up and water run-off. Put stakes in the ground where you plan to put trees and pretend - do you like the location, does it have the desired effect? Look out from inside your house and in from outside. Similarly if you are planning to build a deck, patio or pathway - rope off an area and see how it works - is it the right size and in the proper location? These exercises will help you to avoid costly mistakes. Most properties, houses and buildings are very angular. Curved flower or shrub beds and walkways help to soften those lines.

Do not plant over or under utility or service lines, too close to buildings (remember a plant's mature size) or under eaves. Also, find out where easements are located. Are your house numbers visible and are the entrances safe, especially at night with proper lighting.

Removing established plants is often hard work and you may want to consider renting or hiring specialized equipment and operators. Stumps of poplar and willow that are prone to sprouting should be removed. Chemicals or other treatments to prevent suckering are not necessarily effective and there is a chance of soil or groundwater contamination with excessive application. When removing large trees safety is a primary concern and an expert trained in large tree removal may need to be consulted.

'One of everything' seldom fits in residential landscapes. Your design will need some continuity or common features. Contrasts are important as focal points and for variety - a plant may have interesting blooms (flowering almond), colour (Crimson King maple), shape (weeping caragana or crabapple) or texture (yew). Careful use of variety allows emphasis to be placed where it is desired. However, too much variety causes confusion. Very few houses can support symmetrical, formal landscaping. A natural, informal design is easier to maintain and is more appealing. When planting shrub beds there is a tendency to overplant (especially with small stock). You must allow for the size of the plant material when it is mature. Purchase good quality plants from a reputable grower or supplier.

Maintenance reduces the need for renovation.

Finally, develop a plan for properly maintaining your new landscape. Fertilizing and liming should always be based on soil test recommendations, for most efficient use of time and money. Inspect for insect, disease and weed problems (every time you cut the grass). Prune spring-flowering shrubs after flowering and prune late summer or fallflowering shrubs in early spring. Do not cut the central leader of a shade tree, this will drastically alter its shape. Proper plant maintenance will reduce the need for landscape renovation.

For additional information refer to a new publication entitled Landscape Rejuvenation by B. L. Appleton or consult your local library. A new Factsheet from the Ontario Ministry of Agriculture and Food discusses Lawn Renovation. Information includes reasons for renovating, repairing injury in small areas, soil compaction, methods of renovation and turfgrass selection.

Ski council thanks Inco for support

Another ski season has just concluded and all of us in the Sudbury Regional Ski Council are taking a break before the last meeting of the 1990 season.

I m writing to thank Inco Limited on behalf of our member clubs, from Levack to Espanola, for sponsoring the best race series in any Canadian ski division.

There were two significant highlights that made the past season special.

Your Triangle Team, John Gast and Cory McPhee, provided top notch coverage that everybody enjoyed throughout the winter. Individual photos mean as much to some families as medals do to others.

And this year's Inco Cup Banquet had more than the usual high standards. The choice of Diane and Gord Acton as guest speakers proved to be an unexpected benefit to parents and coaches. Young skiers will remember these two retired competitors for sharing their knowledge.

Many thanks go to Inco and your staff for a very good season.

Sincerely.

Jeff Grieve Chairman Sudbury Regional Ski Council

Neutrino ad draws praise

I have just returned from a meeting of a committee dealing with Science Literacy that is suggesting some of the directions that the Premier's Advisory Councils on Science and Technology may consider when they meet in Edmonton at the end of this month.

The night before I picked up a copy of Saturday Night, May 1990, and observed Inco's exemplary advertisement describing the Sudbury Neutrino Laboratory. It was ideal for a point that I was making on corporate support of science literacy through advertising. The example was admired by a number of educators and government officials around the table.

I realize that this is not the first of such ads that Inco has sponsored, but I certainly hope that you are a trendsetter in such areas for it is badly needed. All too often the public does not realize how allencompassing science and technology is in the daily lives of Canadi-

Your ad is superb and I hope that you continue to keep them going.

Sincerely

Robert J. Crawford, Associate Dean (Research) Faculty of Science University of Alberta Edmonton

Artistic talent alive at Inco

Working in his office at the smelter complex, Barry Bowerman is far removed from the beauty and majesty of Canadian wildlife.

But put him in the basement studio of his Lively home and those same animals jump to life in vivid acrylics on canvas.

Barry is a section leader in Process Technology whose second career is that of a wildlife artist. He took art classes all through high school but never utilized his talents seriously until joining the Lively Walden Art Club in 1985.

Since then he has take a number of courses on his craft, donated his work to Ducks Unlimited and the Kidney Foundation and won honorable mention for an entry in the DU art and carving competition in Sudbury last year.

Today, be is president of a club which enters the 1990s with a rich history, a promising future and a decidedly Inco flavor.

1990 marks the 20th anniversary for the Lively Walden Art Club. The club was formed on April 16, 1970 and members used to meet in the basement of St. Pius X Church in Lively

Loday, they gather once a week at the Bennett W. Moxam Community Centre, formerly the Waters IA School, "It's the most permanent location we've ever had," said Barry. "It meets all of our needs and there's no rental fee for use of the space."

Of 19 registered members with the club. 10 have direct or indirect connections to Inco. In addition to Barry, other members with company connections are Royce Simpson, 26 years service in Mines Construction at Creighton Mine; Jim Kiss, who retired from Creighton Mine with 15 years service: Lyn Goard, who retired from Mines Engineering with 34 years service: Carenie Little, wife of geologist Terry Little: Ron Nadjiwon, husband of copper refinery shipping clerk Nancy Nadjiwon: Shirley Cappelletti, wife of retired Creighton Mine hoistman "Cap" Cappelletti; Ellen Gorecki, wife of Stephen Gorecki in Computer Services; Dawn Duff, daughter of Monty Duff at the Copper Cliff Nickel Refinery; and Margo Oliver, an original member and the wife of Mines Research engineer Phil Oliver.

Remaining club members are Helen Fischer, Peter Morden, Marianne Lepsin, Claude Regimbal, Hazel Wismer, John Huang, Shirley Kenny, Donna Walker and Linda Dunn.

Serving the community

In addition to promoting and encouraging the arts, the Lively Walden Art Club has a long history of community service.

They hold workshops for area children at least once a year when members help youngsters express their artistic talents. They do face painting at the Walden Winter Carnival and act as judges at the Daycare Centre's coloring contest.

In 1988, a Margo Oliver painting was raffled off to raise funds for the Walden Community Library and Senior Citizens Centre. The



Barry Bowerman, section leader in process technology, holds a sample of his wildlife art.

in an art club.

club raised \$1,000 by selling 1,000

During weekly club meetings, members work on individual projects, critique each others work, or listen to guest artists.

The highlight of their season is the annual Spring Exhibit at the Walden Arena. It also provides the best indicator of the club's strength in the community.

This year, close to 400 people turned out for the April 22 show. That was down somewhat from the 500 to 600 attendance figure of a year ago, but still quite respectable considering the competition.

"This year we were up against a well-publicized Earth Day and some much nicer weather," said Barry."But we're still very pleased with the turnout.

"From an attendance standpoint the last two years have been the best shows in our club history. I think there's a greater awareness and interest in art among the general public. People seem to be a great deal more knowledgeable."

Although he said sales at the show were "phenomenal," Barry stressed that marketing is not the main function of the club.

"At our exhibits there is no pressure to buy. We don't exist for the sole purpose of selling. It's more for the love of creating art."

That love prompted Ellen Gorecki to quit her job as an elementary school teacher and pursue a career as a professional artist.

Ellen has been involved in art all her life. Her parents gave her a set of oil paints at age 13 and an uncle in the Netherlands was a wellrespected artist. But a correspondence course in art proved too expensive to finish and Ellen dropped her artistic aspirations to become a school teacher.

"I taught the occasional art class in school but was never able to paint much on my own until I joined the art club in 1983. That was where I was really encouraged to paint with watercolors. Now, it's the only medium I use."

As a full-time artist, Ellen appreciates the support and understanding afforded by membership

"I like the club concept," she said. "I think it's encouraging to find other people interested in the same things you are and to learn from these people.

"It's very hard for people to exhibit in public on their own but the club offers them an opportunity to do so as a group. Our members are all at different skill levels and we encourage everyone to exhibit, whether they be experienced or

beginners."

That 'all-for-one-and-one-forall" attitude is pervasive throughout the Lively Walden Art Club. Its goal is not to discover the next Picasso or Michelangelo, but merely to provide a pleasureable and supportive working atmosphere for anyone wishing to explore their artistic creativity.

"We don't restrict membership," said Barry. "The only thing a person has to have is a desire to



Royce Simpson, in Mines Construction at Creighton Mine, touches up a winter scene on canvas at his Lively home.



Ellen Gorecki, left, wife of Stephen Gorecki in Computer Services, discusses her paintings with onlooker Julie Maynard during the Walden Lively Art Club's annual Spring Exhibit.



Dawn Duff, daughter of instrumentation foreman Monty Duff in the Sulphur Products Department at the Nickel Refinery, poses with her work of art entitled Baseball Blues.



Inco pensioner Lyn Goard, who retired from mines Engineering with 34 years service, works in his basement studio.



Heritage Threads

by Marty McAllister

Giving credit where credit's due

Among the bouquets and brickbats this column receives, the most common question is: "Where do you find all that old stuff?" Sometimes, when my memory is blessed with rare moments of clarity, I can dig up things out of my own past (and that's when I get into trouble). Then there are the other, more reliable sources, and it's likely time to give a little credit where credit's due.

Well-ploughed ground

One of the things you learn very early in the study of Inco history
— or of any history. I suppose — is that you're very rarely on virgin
ground. Just when you think you've uncovered some juicy bit of
octogenarian gossip, you discover that the story has been told before,
perhaps many times. Everybody likes to be first with something, and
a writer lives for the big 'scoop', but that's a rare thing in the heritage
business. Actually, once I got used to the idea that people have been
relating our industry's history since before the turn of the century. I
started to make a little progress.

I've already talked about the wonderful little diaries of John D. Evans; over a hundred years old, they represent history in the making. I've also related how much pleasure there is in combing through old letters and newspapers; they bring alive things that we've only heard about from parents and grandparents.

Unfolding a clipping, perhaps unread since before my late father was born, can be a pretty moving experience — thanks to the people who cared enough to save it.

Although I poked a little fun at him in "The Secret Power", George Silvester brought a sharp memory and considerable expertise to bear upon his chronicles of Canadian Copper's early growth. In the twenties and thirties, E.A. Collins became widely known as a learned company historian. In scores of irreplaceable technical papers and speeches, numerous industry personnel recorded first-hand observations of long-forgotten processes and events.

More recent heritage heroes

Sadly, much has been lost to us forever — some through fire or water damage, some through loss due to a perhaps-too-hasty urge to clean up. More remarkable, however, is the amount of information that has survived, and I am delighted to be able to name a few of the people who helped save it.

Many organizational and physical changes occurred in the seventies around Copper Cliff, and tons of records were in need of screening and relocation. We are indebted to Bob Boudignon for the tender loving care with which he helped segregate the archival material from routine business records (sure, records can become archival, but Jerry wants this to stay under a thousand words, and I'm halfway there

already!).

In the capable custody of Ron Orasi, our Records Administrator, our archives are assured of a fighting chance at long-term survival. Now, if I could just get him to work nights!

Often ignored is the gold mine of historical drawings in the General Engineering building. Be careful, though: some things (like the Copper Cliff to Creighton streetcar line) were never built.

Down in the New York office, Alice Riley spent an important share of her career collecting and protecting documents of every description. Thanks to her faithful guarding of R.M. Thompson's scrapbooks, for example, the history of the Orford Company is much more than a few financial entries in "the big picture".

Sometimes, I actually have to work to find an answer. It was nagging at me to find out which is our oldest active facility, and I had a couple of suspicions, so I wrote to Wyn Williams at Clydach. His prompt reply confirmed my deepest fear: the Clydach Administration Building, constructed in 1901, is still in use. Sorry, High Falls—looks like you'll have to settle for the Continental belt!

Private treasure troves

Not all sources are internal. Of course there are the public and university libraries, shelves lined with both the flattering and the notso-flattering views of our company, but I find it most gratifying of all when someone shares a family treasure.

In 1933, The Sudbury Star published a special edition to mark the 50th anniversary of the discovery of nickel in this area. For a couple of years, I suffered through an incomplete, eleventh-hand photocopy, until Mrs. Anne Friel of Sudbury came to the rescue. Thanks to her, Heritage Threads can rely on a perfect reproduction, complete with an Inco advertisement referring to the new 160-gallon pure nickel kettles in Campbell Soup's New Toronto plant.

An old friend, and a third-generation Inco man, George Tincombe has an absolutely superb collection of photographs from the early days at High Falls, including the building of the Big Eddy dam. Well, to be truthful, the pictures belong to George's mother — but she loans them to him once in a while, so he can take them to work for show and tell.

Mrs. Toots Smith of Sudbury, and Barry Nicholson, now Superintendent at Crean Hill, each sent in turn-of-the-century photos of Copper Cliff. Hopefully, they (the photos, not the contributors) will be welcome additions to the Copper Cliff Museum collection.

Don't let me suggest that I'm getting swamped. I will always be delighted to see more, but what has been shared with me so far has provided some wonderful material for the years to come.

So, that's where the "old stuff" comes from. Material really isn't the problem; what's lacking is that ingredient that seems to run out for all of us: TIME.

Inco ad available as poster

You may have seen it in Muclean's Magazine, or Time, or ROB Magazine — a striking photograph of two Canada Geese and their five goslings swimming on our tailings pond.

It's Inco's 1990 environmental advertisement and it has been so enthusiastically received that Toronto office public affairs has produced a limited number of poster-size editions.

Ontario Division employees who would like a copy should contact Public Affairs secretary Lise Philipow at 682-5425. The posters will be available on a firstcome, first-served basis until the supply runs out.

Assman appointed to superintendent

Gail Assman has been appointed to the position of superintendent, property and office services.

In her new position Gail will assume responsibility for matters relating to the acquistion and disposal of Ontario Division facilities and properties and will retain responsibility for office services, including division communications systems.

She will report to Paul Parker, vice-president of human resources and administration.

In the occupational medicine department Pamela Holmberg has been appointed to the position of supervisor medical surveillance and Janet Martindale has been appointed to the position of supervisor diability management.

Pamela will be responsible for supervising the implementation and administration of health surveillance and health promotions programs for the Ontario Division.

Janet will be responsible for supervising the medical activities related to Ontario Division injury and early rehabilitation programs and for administration of the diability management program.

Both will report to Dr. Robert Francis, manager and medical director, occupational medicine.



Five years accident-free

Workers In the Car Shop in the Transportation Maintenance Department have good reason to be proud these days. They recently celebrated an impressive five years working without a lost-time accident. Workers who helped reach this significant safety milestone, from left, are: Don Brisebols, supervisor Richard Rochon, Mike O'Nelli, Laird Morbin, Marco DeConti, Jeff Labelle, Ray Denomme (on car), Corino Natale (front), Bernie Beauchamp, Gill Courville, Henry L'Heureux, Bernie Beaulne, shop supervisor Gerry Geoffrey and superintendent Wayne Smith. Workers in the Car Shop had established an earlier mark of 10 years without a lost-time accident. "This is a senior working group which obviously takes safety seriously," said superintendent Wayne Smith.

ohn's life is full of sketchy details calling the incident.

guy.

said John. "That's when Mr. New-

When I

heard that I

thought

Oh no.

what

did 1

When John Wasylycia scansthe evening new spaper his eyes are mexorably drawn to the most widely used staple in the industry.

The mug shot.

It is here, among the countless heads and shoulders that populate our country's dailies, that John finds the grist for his creative mill.

John, 64, is an artist, though he avoids the term for fear it might place undue expectations on his

Hissketches will never appear in gatheries, nor will they prompt crazed collectors to bid enormous sums of money at auction. They do, however, provide him with hours of enjoyment and quiet reflection - a noble reward in its own

Inspired by friend

John began sketching in 1974 while working as a long hole driller at Frood Mine, Inspired by the drawings of an artist friend, he enrolled in a night course at Cambrian College despite having no experience in artistic endeavors.

The course began innocently enough, with students sketching live models in traditional garments. Things changed dramatically midway through the course, however, when a mide woman was brought before the stunned class.

John cracked a thin smile re-

were 16 people in the class. evenly split between men and women. he said, "A

"There

lot of the ladies told me they didn't like it (having nude model)."

In 1975. the Cambrian course was droppedbecause of lack of interest, but John continued sketching on his own at home and on the job.

One day white underground at Frood he noticed a picture of Ontario Division president Wint Newman in an issue of the Triangle,

"I picked up the picture and began sketching it on a piece of hand towel," he said. "I left the sketch lying on a bench for a minute and when I came back it was

John never gave the impromptu drawing another thought until a few months later when Newman was visiting underground

Foreman Glenn Strutt brought It seems Glenn Strutt had picked it Newman to the area where John up, put it in an envelope and brought was working at the time, pointed it to Newman's office in Copper at him and said "That's the

> "I said 'I'm sorry, I know I shouldn't be doing that on the job white I'm supposed to be watching my machine.' But he just laughed and said, 'Don't worry, I liked it. Just keep practicing."

> John heeded that advice and has been practicing ever since.

> Seated in front of the television on his living room chesterfield, John creates his sketches on a pad of paper supported on his knees and illuminated by a long tamp pecking

> > over his shoulder. Beside him is a green pencase cil brimming with various grades of pencil and scattered about are newspaper clippings which supply him with his

Sketching celebrities

subjects.

Given the source of his insorration, it's not surprising that many of John's sketches depict the facluded in his private scrapbook are sketches of politicians such as Brian Mulroney, Ronald Reagan, John F. Kennedy and Winston Churchill.

He also has sketches of his four children, his parish priest and Inco's executive vice-president Walter Curlook.

Simply a hobby

"Most of my ideas come from newspapers," he said. "Sometimes Ltry to sketch my family but they just laugh at me when the pictures don't turn out the way they'd like.

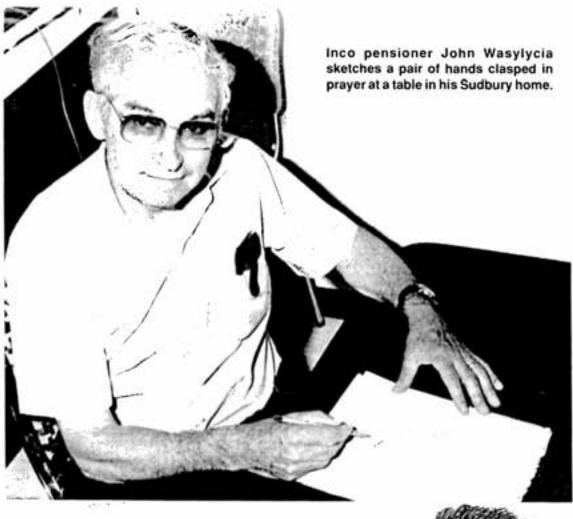
"But I don't care because I like it. When I have a little time to myself I like to sketch. I'm not in it for money or fame, it's just my

Since his retirement in 1988 after 35 years service. John has found plenty of time to indulge that hobby. At least twice a week he takes his place in the living room and adds to his scraphook of sketches.

"To tell you the truth, none of these sketches are as good as I'd like them to be," he said.

"There's always a shade here or a shade there I'll think needs changing.

"I don't think any artist is ever satisfied with his work. The difference is that some have more natural talent than others."



Some of John's subjects include Canadian Prime Minister Brian Mulroney, shown as a caricature above, and former British Prime Minister Winston Churchill.



Other faces that have graced John's easel include Inco Executive Vice-President Walter Curlook, left, and former United States President Ronald Reagan, right.





Salvation Army Red Shield Appeal off to flying start



Inco Limited started the 1990 annual Red Shield campaign with a flourish by donating \$15,000.

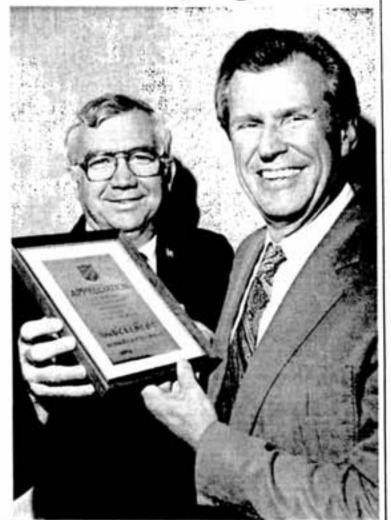
The presentation of the cheque was made by Ontario Division president Bill Clement, who is 1990 honorary campaign chairman.

Celebrating its 95th year in Sudbury, the Salvation Army has set a goal of \$180,000 for this year's. campaign.

A total of \$79,000 had been collected by early May.

Looking over some campaign literature at left are Salvation Army public relations director Captain Harold Hosken, Bill Clement and Geoffrey Lougheed, chairman of the Salvation Army's Sudbury advisory board.

At right, Harold Hosken presents Bill Clement with a commeorative plaque in recognition of Inco Limited's continued support of the Salvation Army in Sudbury. Inco remains the Salvation Army's major corporate backer in the region.



Survey will probe earth's crust

\$50,000 each, while the Ministry of Northern Development and Mines will provide up to \$90,000. The Geological Survey of Canada will

provide technical expertise and onsite supervision.

"During a seismic survey, energy is shot down through the earth's crust and reflects back when it encounters changes in structure or density," said Krause.

"The time it takes for the energy to travel through the earth's surface and reflect back is measured and mapped."

"In earlier days, such surveys were conducted by detonating dynamite in a drill hole and measuring the time it took for the energy to reflect back," said Krause.

"This particular seismic survey will use a technology known as vibroseis."

Four large trucks, each equipped with a large cylindrical plate, will travel the survey route in a convoy. As they proceed, the plates will be lifted and lowered onto the ground in rapid succession, allowing vibratory energy to be created at a well-controlled fre-

An array of 128 geophones laid out along the survey route will measure the return energy. Once data is collected a further six months will be needed to adequately process the data.

"This survey could answer the question as to how the Sudbury Basin was created," said Krause.

"Inco geologists favor the concept of meteorite impact while geologists elsewhere favor the idea of a natural volcanogenic forma-

"Unfortunately, the scale of this survey is such that it won't discover ore bodies," said Krause. "The best that we could hope for is that it might discover environments where ore bodies might exist."

Inco personnel will not be involved in the actual carrying out of the survey but will provide any logistical assistance, geological data or drilling information neces-

"We'll be involved in the sense of watching and monitoring the survey specifications," said Krause. "And we'll be very interested in the results."

Share your knowledge about mining!!

Do you enjoy meeting people? Are you proud of Northern Ontario?

Big Nickel Mine is inviting you to share your stories and experiences with visitors from around the world, there are volunteer openings for hosts for above ground visitors and guides for the underground tours. Your resources will be an asset for the summer students.

Do you have three or four hours once a week? You pick the day and the time. We guarantee you will have a fun summer representing mining and Sudbury to visitors from around the world!!

Big Nickel Mine is open April 30 to October 9, 7 days a week.

For more information call Volunteer Co-ordinator. Carol Lalande at 522-3701 or Big Nickel Mine Manager Brenda Tremblay at 673-5659.

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Friday — (Beerlest & entertainment)	\$ 6.00	
Saturday — biggest high school dance featuring "1964" and Spyre (school grounds)	\$ 600	0

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REUNION '90

TO BE HELD

JUNE 29TH, 30TH, AND JULY 1st

AT THE SCHOOL

*N.B. save \$2.00 by attending \$10.00 both functions

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Manager Public Affairs Jerry L. Rogers

Publications Editor John Gast

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