

INCO
Triangle
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In this issue

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Chuck Baird speaks about Sudbury

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Our Cover

This striking shot of a dandelion in seed was done by Dick McIvor a senior design engineer at central maintenance. Dick is the president of the Sudbury Camera Club. A story on the club and other pictures by club members, begins on page 16.

Recent Staff Appointments

Ronald Aelick, mine general foreman, Copper Cliff South mine

Fred Beaudry, industrial evaluator, industrial engineering, Copper Cliff

James Bellisle, maintenance foreman, Copper Cliff mill

Wendy Bertrand, clerk stenographer, Copper Cliff nickel refinery

Fred Birchall, incentives administrator, mines engineering, Copper Cliff South mine

Rodney Cooper, planner, mines engineering, Stobie mine

Denis Dallaire, survey party leader, mines engineering, Copper Cliff South mine

George Darling, division supervisor, mines engineering, Copper Cliff South mine

Normand Desforges, process supervisor IPC, Copper Cliff nickel refinery

Geoffrey Fong, planner, mines engineering, Stobie mine

Don Fraser, general foreman safety, Copper Cliff

Steve Grinius, mine foreman, Creighton nine shaft

Pat Hodgins, senior process assistant, Iron Ore Recovery Plant

Debbie Huneault, senior purchasing clerk, purchasing-warehousing, Copper Cliff

Shayne Hyde, senior process assistant, Copper Cliff mill

Frank Jay, senior advisor mines research, Copper Cliff

Robert Kerr, services foreman, Stobie mine

Ann Koivu, clerk stenographer, engineering, Copper Cliff

Michael Leblanc, rock mechanics technician, mines research, Copper Cliff

Janet Lindala, process assistant, process technology, Copper Cliff

Robert Lusk, division supervisor, mines engineering, Stobie mine

Bill Moffatt, senior advisor mines research, Copper Cliff

John Ricketson, mine superintendent, Copper Cliff South mine

Luba Seawright, plant clerk, Levack mine

Elizabeth Swech, clerk stenographer, Copper Cliff transportation

David Taylor, mine foreman, Stobie mine

Craig Todd, geologist, mines exploration, Levack mine

Richard Trembley, planner, mines engineering, Copper Cliff South mine

Brian Young, division supervisor, mines engineering, Creighton nine shaft

"Direct Line" boxes Now at all locations

Boxes to hold the Direct Line supplements are now up at all mines, mills, plants and offices in the Ontario division. The boxes are clear plastic so the color-coded supplements can be seen at a glance. The regular quarterly issue of Direct Line will continue to be mailed to the employee's home. At Garson mine, carpenter **Ernie McKerral** (right) bolts a box to the warm room wall. At the same location (below), **Lewis Trapasso Jr.**, a topman assistant, left, takes a supplement from the new box while **Joe Landry**, a sanitary nipper, waits his turn.



On April 22, Charles F. Baird, the chairman and chief executive officer of Inco Limited, addressed the Sudbury Regional Council. Excerpts from that address follow.



Here in Sudbury we have the largest nickel mining and processing facility in the world. It is a cost competitive facility and we intend to keep it that way. We shall continue to focus efforts on improving productivity in order to offset the impact of inflation on operating costs. I might add that despite a labor cost disadvantage we have been in an advantageous position here because Canadian sulphide ores require only about one-third as much energy to process as lateritic ores. Our Canadian orebodies are sufficient to support production at an optimal rate for decades. Thus, our Indonesian and Guatemalan operations will supplement, not replace, our Canadian production. Our belief remains unchanged that non-subsidized ocean mining will not be competitive for a long time in the future. Finally, we have great confidence in the skill and productivity of the thousands of employees who work so hard to turn a great natural resource into valuable products.

So our longterm commitment to Sudbury is clear. As Ed Carter (former Inco Limited chairman) said to the Council, "... we intend to stay in the nickel business, and our Sudbury operations will continue to be our principal source of production." We are here for the long haul, and I reaffirm that commitment to you.

I am not here to make any major announcement. There is one subject relating to our longterm future, however, that no doubt will require substantial future investments, and I want to give you a progress report. I refer to production restraints resulting from environmental regulation and what we are doing, and what we intend to do, to restore our ability to increase

.. our longterm commitment to Sudbury is clear."

production in response to market conditions.

All of you are familiar, I'm sure, with the fact that we are proceeding with the new process for separating and rejecting additional quantities of pyrrhotite. Work is proceeding on schedule at the Copper Cliff concentrator. The modified facility should enable us to maintain our Ontario production capability at 280 million pounds of nickel per year while complying with the Ontario Government's reduced limit on smelter sulphur dioxide emissions schedules to take effect January 1, 1983.

You also know we are carrying out a commercial scale test at our Thompson, Manitoba smelter of a novel smelting process for nickel sulphide concentrates. The planned major modifications at the Thompson smelter were completed in January of this year. Roasting and smelting tests are proceeding as planned. Test result evaluations are expected to be

available around the first of next year.

We believe that this process, which would involve the production of large quantities of sulphuric acid, has the greatest potential for significant further reductions in sulphur dioxide emissions at our Sudbury smelter. Importantly, the technology has the potential for improving workplace conditions and metals recovery.

I am pleased to say that our scientists and engineers are encouraged by the results to date. I must caution, however, that there are many hurdles to be overcome.

If the smelter test and engineering feasibility studies produce favourable results, implementation of the new process would require extensive modification or replacement of existing smelter facilities at Sudbury and construction of additional acid production capacity. This would take many years and cost hundreds of millions of dollars.

Not the least of our problems

would be the necessity to dispose of very large quantities of sulphuric acid over and above some 800,000 tons we already produce annually. Over the past several decades, we have worked closely with C.I.L., who have done a remarkable job of developing and expanding markets for smelter-sourced sulphuric acid. If further reductions in emissions are not to result in significant cuts in nickel and copper production, we must find outlets and uses for major additional quantities of acid. There is simply no way to store it. Past studies have not been encouraging, but circumstances change. Early this year, we commissioned another study by a Canadian research group. We expect to receive their report this summer.

Governments are also giving much consideration to this problem of sulphuric acid disposal, not only by us but by others. It is closely coupled with the whole question of environmental controls on companies such as Inco and, if not resolved, has profound implications for the economies of Ontario and Canada.

The second major objective we described to you in 1979 was to manage our rates of production in a manner to preclude or minimize undue fluctuations in employment. We cautioned that our success ultimately will be dependent in large measure on market forces beyond our control. We then stated: "If we are successful in meeting the objectives, fluctuations for the next few years in our total employment in Sudbury, including staff, will be within a reasonably narrow range above or below our present level of approximately 14,000 people."

Let me comment briefly on the market forces we have faced over the past year, and the future outlook.

Non-communist world nickel demand declined 15 per cent last



Prior to his address to Sudbury Regional Council, Mr. Baird visited the copper refinery. Here he meets three casting crew members in the silver bar casting room. They are, from left, Greg Warnock, Connie Laferriere and Frank Columbo.

continued on next page.

year to an estimated 1,150 million pounds. This decline was due to the impact of adverse economic conditions on nickel consumption and a large reduction in nickel inventories or consumers prompted by the lower level of economic activity and by high interest rates.

Nickel producers reacted quickly to the fall in demand, however, by curtailing production. Non-communist world nickel producer inventories rose to around 400 million pounds at year end 1980, but were still within the range considered "normal" for the industry (and about half their level at the end of 1977).

Nickel demand in the non-communist world during 1981 is forecast to be in the range of 1.1-1.2 billion pounds, or little changed from last year. We are somewhat optimistic that demand will approach the upper end of this range, since consumers appear to be moving away from a "hand-to-mouth" inventory policy.

As a result of additional production curtailments announced by Inco and several other products affecting 1981 output, new supply is forecast to fall to about 1.2 billion pounds in the non-communist world, which would result in little change to producer inventories at year end.

Longer term we project an annual growth rate for nickel not exceeding 4 per cent but well above the 1 per cent of the latter half of the 1970's. Demand should reflect the urgent need for the Western World to address its energy, defense, labor productivity and environmental problems. Supplies should be adequate through the middle of this decade, although from time to time, during cyclical periods of high consumption, supplies will be tight. In the latter part of the decade there is a greater possibility of shortages. Supply will not grow to meet demands unless nickel prices rise substantially to justify investment in new capacity. Inco, an established producer with spare capacity, will be well positioned to benefit from these conditions.

We have achieved our objective of avoiding substantial fluctuations in our total employment in Sudbury, despite the decline in nickel inventory. Through the use of manpower attribution, and production plans which enable us to take early action in response to market conditions, we indeed have kept our employment at about the 14,000 level in Sudbury. In order to maintain a prudent balance between production and world-wide nickel consumption and at the same time maintain our employment objective we have scheduled summer shutdowns this year in Sudbury and Thompson.



During the last half of 1979 and through the first half of 1980, we offered employment to all hourly rated employees, with recall rights, who were laid off in February 1978. 869 accepted recall and returned to work. In addition, we hired selectively during 1980 for key personnel and where special skills were required. During December 1980 and January 1981 we hired approximately 50 new employees to maintain our planned production levels.

Now, Mr. Chairman, let me turn to a review of several other points made by Ed Carter in 1979 and certain events that have taken place since then.

In his address to you, Ed expressed our intention of seeking a downtown location for a number of employee and community-related functions. I am pleased that we have been able to locate these functions in the new Scotia Tower, and as soon as these facilities are completed, we will begin utilizing them for personnel involved in employment recruiting, employee benefits, employee counselling, training and development, internal audit and public affairs.

Ed Carter also said to you that "We are prepared to work with you and others to insure that our policies, plans and actions are coordinated with those of the community, and we pledge our continued general support of significant diversification efforts that will strengthen the economic base of Sudbury. He also stated that "we will share with our employees and interested community groups meaningful information concerning company policy, plans and actions."

These two commitments — support of significant diversification efforts, and sharing meaningful information with employees and the public — were particularly important pledges, and I would like to elaborate on our efforts to fulfill both of them.

Looking first at our support diversification efforts, let me list a number of specific initiatives:

- We have provided \$200,000 cash contribution to fund a feasibility study of the Sudbury Science Centre and subsequently pledged a capital contribution of \$5 million.
- We have continued to work closely with the Region in the prototype greenhouse studies using mine waste heat from our Copper Cliff South mine to grow vegetables.
- We have continued the joint study with the Region and Ministry of Energy to determine the feasibility of using solid refuse to produce a clean-burning fuel.

- During 1980, we made total cash contributions of more than \$1 million to Sudbury organizations and activities. Our major contribution was \$400,000 for the CAT scanner for the Sudbury General Hospital.
- Company research is at the pilot plant state on a new process which could lead to building a refinery facility in Sudbury. If successful, this would permit the full refining here of all gold and silver we recover from the Sudbury ore and engineering plans would be undertaken for building a modern environmentally-sound refinery facility at an estimated cost of \$30-\$50 million.

Turning now to communication programs, I believe we have made significant progress:

- As you will recall, Wint Newman and his colleagues met with you last April and reviewed their operational plans for 1980. Wint plans to request a similar meeting again with you this year.
- Within the company, we have initiated face-to-face communications sessions with all divisional employees; more than 275 meetings were held to conduct discussions of company plans and employee concerns. These meetings will be repeated on a regular basis.
- We have held recurring meetings on the subject of ocean mining with the Regional Chairman, the Mayor of Sudbury, Local 6500 of the United Steelworkers, and the Sudbury Chamber of Commerce.
- We also conducted 590 Safety Workshop sessions to review safety performance and ask for input from employees as to methods for improving safety performance.

In this regard, I want to emphasize our commitment to a very high standard of safety performance throughout the Company. Unfortunately, in 1980 we had seven fatalities in our Canadian operations — six at Sudbury. This performance was most unusual and was just not



Sid Segsworth, superintendent of the casting and transportation services department, discusses the casting process with Mr. Baird and Ontario division president, Winton Newman, in the anode casting section of the copper refinery.

acceptable. We have worked hard to identify and eliminate the causes and will continue to do so.

We know that the safety improvement objectives can be accomplished with the cooperation and support of our employees and unions and the joint safety and health committees. The well-being of our employees is a prime corporate objective. We know that technology and investment will not do the job alone. It is people who produce results.

I want to commend the efforts of Local 6500 to improve community understanding, concerning the possible future impact of ocean mining. As I am sure all of you know, the Union sponsored a seminar in Sudbury in late February. Government representation from Sudbury, Ottawa and Toronto, union officials from Sudbury, Thompson and Port Colborne, and representatives of Regional Government, Falconbridge and Inco participated in the discussions.

I also want to commend the Honourable Judy Erola, Minister of

State (mines), members of her staff, and his excellency J. Alan Beesley, Canadian Ambassador to the United Nations Law of The Sea Conference, for coming to Sudbury to present the Federal Government's position on this important issue. I believe this is an excellent example of the way in which all of us can and should work together on opportunities and problems of mutual interest.

In closing Mr. Chairman I would like to reiterate once again Inco's long term commitment to Sudbury and our near term objective to manage our rates of production in a manner to preclude or minimize undue fluctuations in employment.

The long term value of Inco's Sudbury operations to this community ultimately depends on our ability to remain a reliable and competitive supplier of nickel, copper and precious metals to the international market. We are committed as responsible managers to the achievement of that goal. To fulfill that responsibility we will need the co-operation and support of all concerned.



EPABX automates phone system at Carson mine



EPABX has come to Carson mine. The electronic private automatic branch exchange, EPABX for short, is a computerized interplant telephone system, the only one of its kind in the Ontario division, according to Warren Thompson, telephone foreman in the power section of the central utilities department. Warren's communication crew was responsible for installing the EPABX which replaced the original, somewhat outdated interplant telephone exchange.

"The original exchange was obsolete and had deteriorated beyond repair," Warren explained.

The battery-operated EPABX can handle 24 conversations simultaneously from a total capacity of 192 lines. It consists of the maintenance administration panel and the main exchange panel.

The maintenance administration panel is used for system programming and diagnosing problems or "trouble shooting" within the exchange. It features an illuminated readout which shows communication personnel what is happening while it is being operated.

The main exchange consists of approximately 40 printed circuit

boards and a micro-processor which handles all normal traffic flow and option functions. A cassette tape recorder within the main exchange stores all information that is programmed into the system. Should there be a malfunction, it is diagnosed and repaired. After the repairs are made, the tape recorder will reprogram the system within three and a half minutes.

The communication process from a calling party to a called party takes only seconds to complete.

In the start-up program, the exchange, including the required options, is established as a fully functional system. Specific program instructions are keyed in to the maintenance administration panel then transmitted to the main exchange.

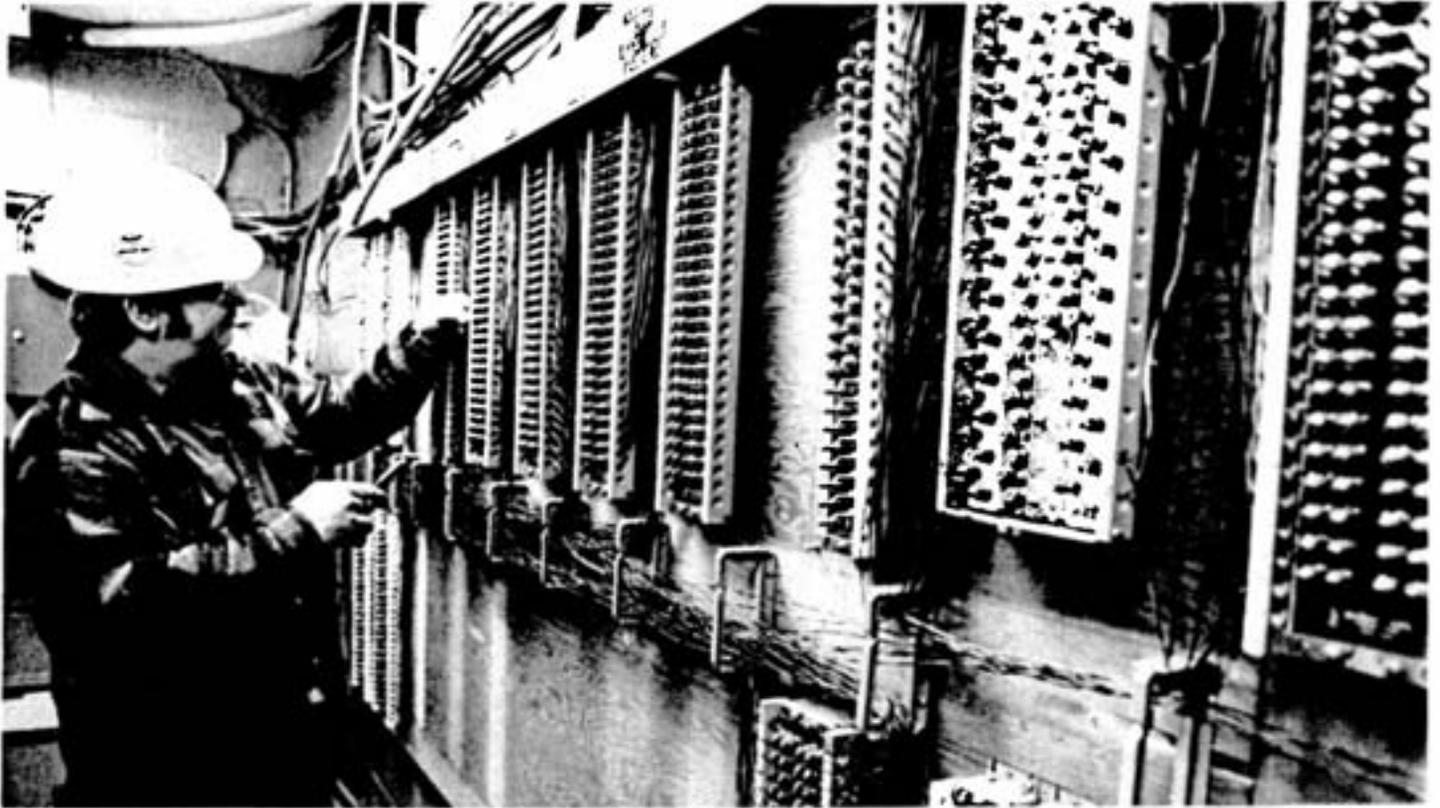
To complete the communication link, the micro-processor channels the information to the appropriate circuit board. "The micro-processor is like the human brain that sends a signal to a certain part of the body to command it to start performing," Warren explained. From the circuit board the information is sent to the telephone being called, whether it be underground or on surface.

The exchange features fail-safe, total electrical failure protection and lightning surge protection, as well as options such as call forward and station call back. This improves communication efficiency, Warren stated. The exchange is expandable to the future needs at Carson mine; it can also be interconnected with Bell Canada's telephone lines which would further reduce operating costs and improve communication services.

It took about a month for the new exchange to receive the fully operational status, a job which involved installing new surface cables to interconnect with those existing ones underground and on surface and familiarizing those responsible for its installation and Carson personnel with the operating functions and command codes.

"It was a very interesting job to perform," Warren commented. "We learned a lot about installing the exchange from the manuals that came with it."

"The transition from the old to the new went as smooth as silk," and the reason for that, Warren stated, was due to the "fine workmanship of the people involved."



Foreman Warren Thompson, left, and crew member Ray Laakso look over the switching gear in the old telephone exchange at Garson mine.



Arvo Linamaa, a member of the communication crew, makes a repair on a distribution terminal that connects telephone lines to surface and underground areas.

2. Communication crew member Jean-Marc Ethier, seated, keys an access code into the maintenance administration panel to trouble shoot as fellow crew members Arvo Linamaa, left, and Fahmi Azzeh look on.



Richard Jacobs is flanked by just a portion of his bottle collection that numbers somewhere between 7,000 and 9,000 bottles.

Just think of the money he'd make on bottle returns

Richard's bottle collection includes bottles of nearly every conceivable shape and colour. Here he holds a dumbbell shaped decanter whose brown colouring was achieved by the glass manufacturer adding gold to the glass while it was still in a molten state.



Bottles — a lesson in history for Richard Jacobs

As far as hobbies go, Richard Jacobs, a maintenance mechanic with central maintenance, has got himself a dandy. He collects bottles. Deliberately time-consuming, often expensive and absolutely fascinating, Richard's fixation with bottles of all kinds from the past has led to him building a collection of several thousand bottles of every shape and hue imaginable.

Richard began hunting for bottles about eight years ago. "I just came across a box of bottles that someone was throwing away," he recalls. "I left it in the basement for a while. Then I picked up a book on bottles and I started."

Now he estimates his ever-growing collection to be somewhere between seven and nine thousand bottles. "I lost track a long time ago," smiles Richard. He places the value of his bottles at "about \$15,000" with a couple of pieces being worth more than \$100 each.

He hastens to add that this is neither the biggest nor the most expensive bottle collection around. Some collectors in Southern Ontario have gathered nearly twice the number of bottles, some of which are priced in the several thousand dollar range. There are about 180 bottle collectors in the nation at the present time.

Through the autumn and winter Richard spends about three days a week dealing with some aspect of bottle collecting. During the summer he devotes himself to camping and fishing with his children. Already this year Richard has spent six or seven weekends searching for bottles in Southern Ontario where bottle pickings are much better. He attends bottle shows where he buys or bargains for new acquisitions.

In the past, Richard has dug for bottles in old dump sites or has traded or purchased them a few at a time. Experience has taught him that the best way to get bottles is to buy entire collections. "That's the only way to buy," he declares. "If I went out and bought them piecemeal it would be too expensive." An entire collection of bottles might yield only a few items that he does not already have. The rest he saves and stores. He uses them for trading purposes or he sells them from his booth at the flea market.

A large part of Richard's basement is devoted to housing his startling collection. The shape, style, colour and labels of the bottles all yield some hints and insights into the past.

Some date as far back as 1890. Many, like the bottle that used a marble floating in the neck to seal itself, are real conversation pieces. Others would inspire fits of nostalgia for those old enough to remember such bottles.

Richard points to a bottle that used to contain a cure-all from the Prohibition era known as Lydia Pinkham's Vegetable Compound. "With a gin content of 30 per cent, the stuff didn't cure too many people of anything, but it sure made them feel better," he says with a laugh.

Richard's collection includes patent medicine bottles, perfume bottles, liquor bottles, ink bottles, pop bottles, beer bottles and a whole lot of bottles that fall into the miscellaneous category.

Richard is especially interested in beer bottles. His shelves hold beer bottles from one coast of Canada to the other dating back several decades. As well as old paper labeled longnecks from Sudbury's own Silverfoam brand, Richard has

some old Labatt's bottles that feature the old beermobile on the label and exhortations to buy war bonds on the backside of labels.

Collecting has been an educational experience for Richard. He has gained a lot of knowledge about every facet of bottles, from the way they were made to the people, companies and towns with which they were associated. It is not unusual to find Richard pouring through microfilms or writing for information from some individual or institution in order to trace the origins of one of his bottles. "I was never interested in history in school," he notes. "With this interest in bottles I've been digging into history of companies and even towns."

Having heard of some of his bottle hunting endeavours, some people have come to question Richard's sanity. "Once they come and see it all, they change their minds," he says. "While inflation diminishes the value of other things, Richard continues, his bottle collection is continually going up in value. Citing smoking, drinking and other "recreations" he points out that he could be spending his money more foolishly than on historical bottles.

Lately Richard has been concentrating his efforts in finding bottles native to Northern Ontario. "I'm partial to bottles from the North," he adds. He welcomes any help people are willing to offer in locating such bottles.

By the same token, Richard is willing to share his expertise and time with anyone wanting to learn about or begin bottle collecting. For a bottle hunting novice or anyone with even a remote interest in history, Richard represents a considerable resource.



Jack Musico and Terry Heale instruct maintenance office staff on how to read and interpret new computer printouts. Pictured here are, sitting, from left, Barry Bitner, maintenance services coordinator and Brian Scott; standing, from left, Jack Musico, Terry Heale and Alex Felhazi.

Over the last two years Inco's systems implementation team has been introducing the standard maintenance management system to the Port Colborne nickel refinery. As the team's work draws nearer to completion, a better, more efficient approach to maintenance functions is happening.

Following a preparation period of a few months, the systems implementation team from Copper Cliff's central maintenance department began the business of laying the foundations for the standard maintenance management system in September, 1979. Leno Crema, senior mechanical maintenance engineer and senior project leader, Jack Musico, central maintenance supervisor of systems and controls, Terry Heale, preventative maintenance specialist and Charlie Nicholson, accounting systems specialist, formed the systems implementation squad.

Their task, basically, was to develop a new approach to the



Gino Foresi, shops' foreman, left, and Barry Bitner, maintenance services coordinator, middle, review the mobile inspection and repair program with Terry Heale.



Terry Heale, right, instructs Brian Scott, prevention maintenance coordinator, on how to develop an inspection for plant equipment.

Standard maintenance management system makes things more efficient in Port Colborne

operation of the refinery's maintenance section. The new approach is a four faceted program involving a work order system, a preventative maintenance program, cost control and budgeting and a material procurement plan.

The previous system did not use work orders, so when breakdowns occurred there was no means to allow a proper cost analysis of work that went into repair or replacement of equipment. "There was no way they could job-cost the job," says Jack. "There was no way they could isolate the cost of the job."

Now all costs incurred by maintenance people are detailed on a work order system. Labor, material and overhead costs are all duly noted. Because maintenance costs account for such a large slice of operations expenses in a year, Jack notes that it is imperative for a company to get control of maintenance costs. He calls it "one of the most important areas for industry in the 1980's."

Before the adoption of the preventative maintenance program, equipment maintenance involved going from one breakdown to the next. Terry Heale undertook an exhaustive cataloguing of all the specifications of every piece of equipment in the plant. Now an inspection and lubrication program has been instituted to maintain the upkeep of the equipment on a regular basis.

The physical and safety standards, as a result of the new approach, have been upgraded significantly. Adds Jack: "The physical condition of this old plant has improved to the point where they have very few breakdowns. Production schedules are being met and great cost savings are being realized."

The introduction of cost control and budgeting has seen the types of maintenance work defined and separated. "It allows operators to better manage their maintenance workload," continues Jack. "Costs that are being incurred can be controlled and monitored." Now costs can be calculated on a weekly or a monthly basis giving operators some idea of which direction to work towards.

The material procurement plan means that labour and materials are planned completely for each job ahead of time. Previously materials and men were ordered as each job

arose causing wasted manpower and materials. The inefficiencies have been removed from this system.

Jack reports the Port Colborne operators are pleased with the new developments. "The operating of this plant by operations and maintenance is just as good as any plant in the province," he concludes. The new system should be in place by September, 1981 and, at that time, the total responsibility of running the maintenance management program will be with Port Colborne personnel under the supervision of Bill Kantymir, superintendent of operations.



Charlie Nicholson points out some organizational requirements to, from left, Roy Harrington, Bill Kantymir, Leno Crema, Terry Heale and Jack Musico.



From left, Roy Harrington, maintenance superintendant, Jack Musico, Lloyd Doucette, inventory control monitoring supervisor and Frank Kubena, stores foreman, explore the newly renovated stores and stock set-up.

BLOCK



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PARENT



A place to

On his way home from school a youngster is bullied by some older children; a stranger pulls up in a car and offers a ride to a girl as she walks to her friend's house two blocks away; an angry dog harasses an elderly man during his daily stroll; a little girl injures her arm when she falls off her bicycle a few blocks from home.

What would you do if you were in one of those predicaments? Where would you turn for help?

The answer may be as close as your next door neighbour's front window where there is a distinctive red and white sign of a child holding an adult's hand and the words BLOCK PARENT printed on the sign.

In an emergency situation, anyone of any age can go to such a home says Bill Thompson, chairman of the Jaycees organizing committee for the Sudbury Regional Block Parent Association and its Block Parent Program. "There's no age limit for

those who want to use the program," Bill explained. "It is, however, primarily geared to pre-schoolers and elementary school children."

The aim of the Block Parent Program, which was initiated in London, Ontario in 1968 by the National Council of Jewish Women, is to discourage those who would prey on children. The program consists of several homes on each block in a community displaying a BLOCK PARENT sign. The sign indicates to a child that help and protection in an emergency are available at that home when the sign is displayed.

A few years ago the Sudbury Jaycees became involved in organizing local groups of concerned citizens who wished to adopt the Block Parent Program in their areas. Along with financial assistance from the Jaycees, the program was implemented and formally endorsed by; the Sudbury Regional Police Commission, the Sudbury Regional

Police, the Regional Municipality of Sudbury, the Sudbury Board of Education, the Separate Schools of the District of Sudbury, the Ontario Safety League, the Canadian Association of Chiefs of Police, and the Canada Safety Council.

An "outgrowth of the program" as Bill puts it, was the establishment of the Sudbury Regional Block Parent Association earlier this year. There was a definite need for the program and the association, Bill stated. "There isn't an area in this region that isn't immune to a child being molested or physically abused."

The Sudbury Regional Block Parent Association consists of an executive body whose members include representatives from the Sudbury Regional Police, the Jaycees, the Regional Municipality of Sudbury, the separate and public school boards; area co-ordinators who are responsible for organizing the Block Parent Program in their own areas;



Don Wighton, a surveyor at Levack mine, displays the BLOCK PARENT sign to his son Jamie.

Barb White, Copper Cliff Block Parent area co-ordinator, left, husband Al, sons Billy (bottom left) and Mark present a BLOCK PARENT sign to new Block Parents Al and Linda Cruthers as their children Joanna and Jonathan witness the occasion. Al Cruthers is superintendent of operations at the copper refinery.

turn in an emergency

and those concerned citizens who have had the title BLOCK PARENT bestowed on them. "It is a privilege to be a Block Parent, not a right," Bill commented.

Block Parents have no legal status except that of private citizens. They have volunteered to act as responsible adults in emergency situations involving young or old in their neighbourhood.

Any responsible person over the age of 15, married or single, with or without children of their own, may become a Block Parent once their Block Parent application form has been screened and approved by the Sudbury Regional Police. The application form is available from any elementary school principal in the Region, any Block Parent area co-ordinator or the Sudbury Regional Police.

Although still in its infancy, the Sudbury Regional Block Parent Association has attracted some 3,000 Block Parents and about one-third of

those are Inco employees, according to Bill.

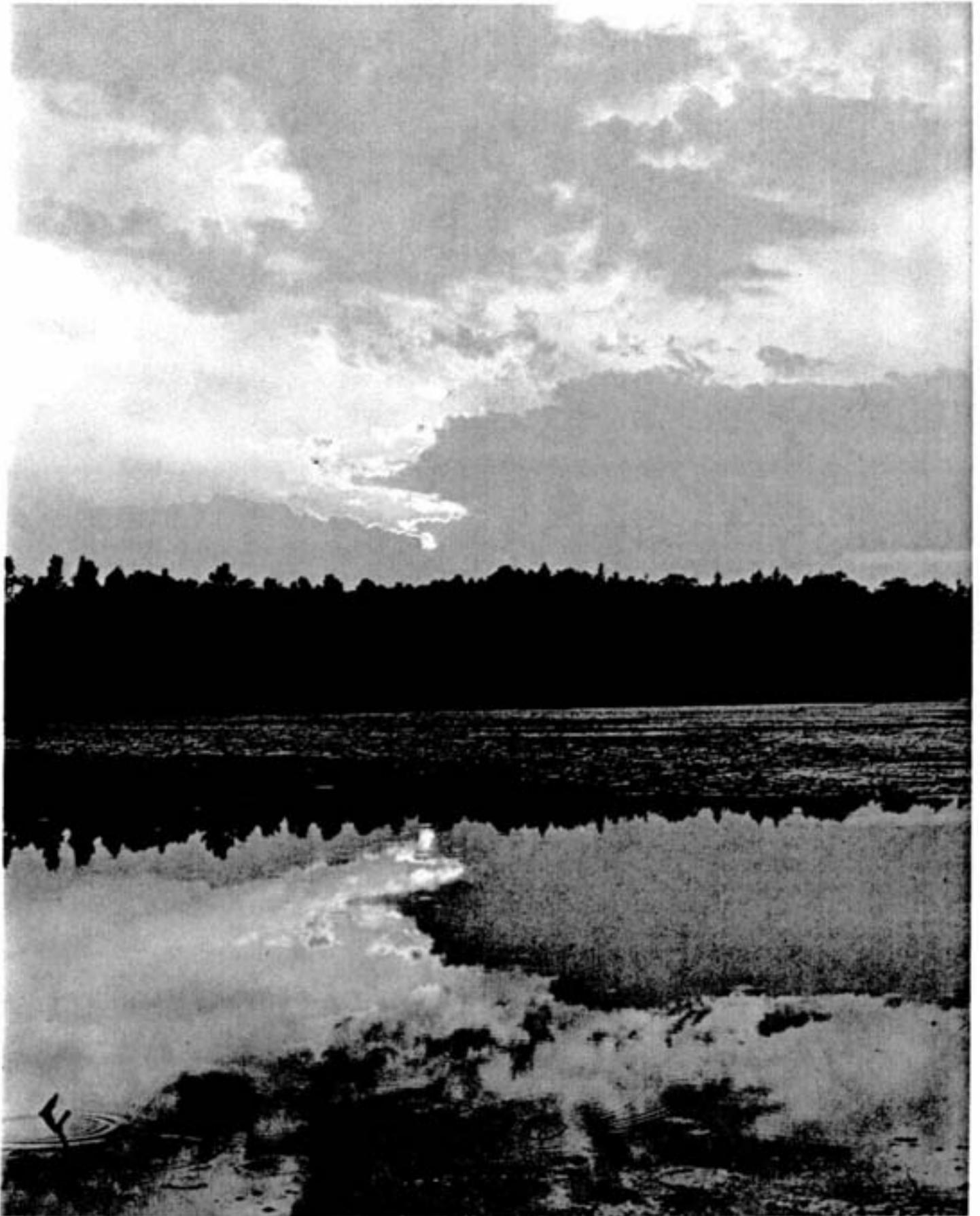
Don Wighton, a surveyor at Levack mine, and his wife Carol, who is a Block Parent area co-ordinator, reside in Lo-Ellen Park/Long Lake section of the Region. They learned about the Block Parent program from Don's brother who is a Block Parent in Toronto. With children of their own, Don and Carol thought being Block Parents would be very worthwhile. One of the responsibilities as a Block Parent, Don said, was educating his own children about the Block Parent Program. "Although they are quite young, we are trying to teach them, that a Block Parent home is like a second home. If they are scared or in trouble, it's a safe place to go. It's a sanctuary for them."

Al Cruthers, superintendent of operations at the copper refinery, and his wife Linda recently became Block Parents in the Copper Cliff area. They were made aware of the Block Parent

Program through neighbour Barb White, Copper Cliff Block Parent area co-ordinator. Their interest grew and soon after they were recipients of a BLOCK PARENT sign. "Naturally we are concerned about the welfare of our own children, but we are also concerned about other children," Al stated. "As Block Parents we feel satisfied to be of help to those who need it."

Barb White stressed the point that being a Block Parent is not a glorified babysitting job. "It's a means of better protecting children. In emergencies involving child molesters it is the Block Parent's responsibility to call police and parents while protecting the child," she explained. "When a child is injured or ill, the Block Parent must contact the child's parents. If they are unavailable, the Block Parent should contact the police."

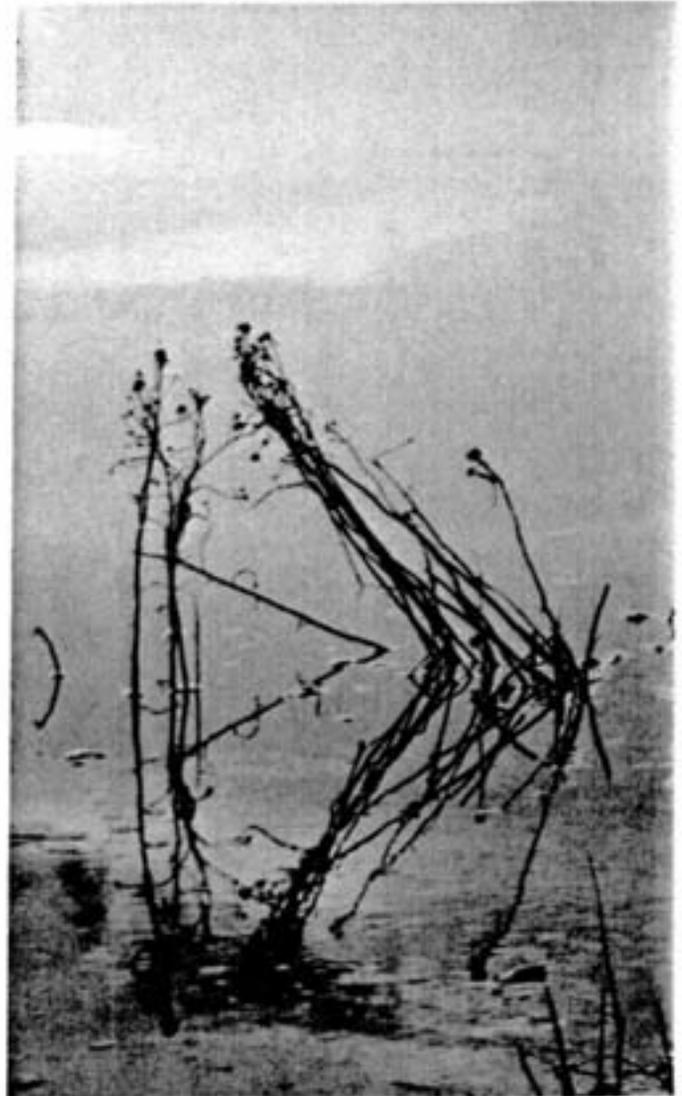
"If I can prevent a child from being frightened, isn't that reason enough to become a Block Parent?"



Reg Beach captured the essence of sun, clouds and water in this photo.



You can almost feel the dew on Larry Stevenson's shot of a purple violet.



Reflections of weeds in water turn Ward Isnor's image into an abstract.

Images by Sudbury photographers

Anyone who is interested in taking photos or improving their photography should know about the Sudbury Camera Club. The quality of the work they do is evident by the photographs shown on these two pages, and on the front cover.

Several club members are Inco employees, including Dave Platt, a carpenter at Froid mine, Eero Mansikka, a senior surveyor with central utilities, Reg Beach, a statistical reports clerk at central mills and Larry Stevenson, a brakeman in the transportation department. Colin Reid, secretary-treasurer of the club, is retired from Froid engineering. Dick McIvor, a senior design engineer at central maintenance, is the president of the

club.

Dick feels the name, Sudbury Camera Club, may be a little misleading. The emphasis is not on camera equipment, but rather on creative quality color slides. "Our basic philosophy is that you don't even need a camera — you only need an interest in photography to be part of the club."

For a nominal membership fee, people have the opportunity to exchange ideas and receive help from other club members. They can get answers to questions they may have. It also gives people a chance to enter their work in contests and exhibit some of their better slides.

The purposes of the club include fostering an interest in color

photography; promoting color slides, print salons, and exhibitions; compiling and circulating information relating to color photography; and promoting and sustaining friendly relationships among persons engaged in color photography. The club is not completely confined to color slides, however, and some members also do color prints or black and white photography.

If you would like to learn more about taking photographs, or if you just appreciate good photographic art, Dick McIvor and the rest of the club would be glad to see you at one of their meetings held every Wednesday in Room 223 of Lockerby Composite School at 7:00 p.m. from September to May.

Shift league hockey

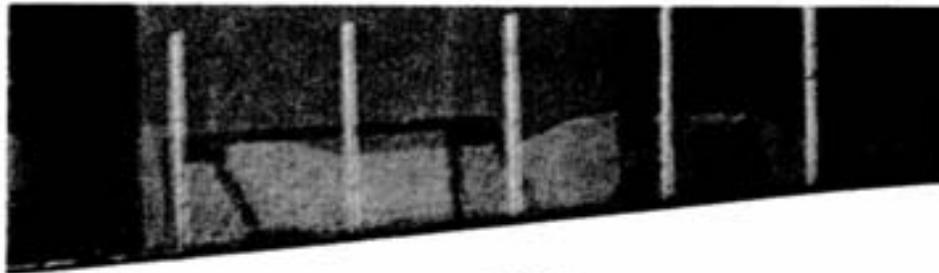


The new shift league champions, Coleman mine.

The 1980-81 campaign of shift league hockey concluded recently as Coleman mine swept the best of five final in three games straight from Creighton mine. Coleman outscored Creighton 4-2, 3-1 and 6-1 to capture the championship.

Coleman's victory was considered by some to have been a slight upset as Creighton had dominated play during the regular season easing into first place with a comfortable margin of points.

Coleman vaulted in the final with



Creighton goaltender Mel Hibbs makes a desperation dive to thwart a Coleman scoring chance.



"Coco" Simons of Coleman mine tries to elude the check of Creighton's Brian Reid.

ague finals

its domination of Levack-Frood in the semi-final series. In the meantime Creighton easily disposed of Garson to earn a berth in the championship round.

The three Coleman-Creighton clashes proved to be close, ruggedly contested affairs. On each occasion the teams found themselves tied going into the final period.

Ralph Prentice paced the new shift league champions in the deciding game by notching three goals.



Ralph Prentice, right, captain of the Coleman mine hockey team accepts the championship trophy from shift league president Pat Soucie.

Spring has sprung and the grass has riz!

But do you know how to maintain your lawn properly?

Inco's gardener Alex Gray offered some basic, helpful hints to ensure a healthy lawn.

All debris such as dead leaves and branches that have gathered over the winter should be removed by raking the lawn thoroughly. "This prevents the spread of fungus or disease organisms," Alex explained.

"A uniform application of spring fertilizer will rejuvenate a lawn that has been inactive all winter," he continued. Fertilizer helps a healthy lawn to better tolerate stresses such as drought, wear, extreme heat, insect and disease problems. Excessive nitrogen applications should be avoided, especially during heat stress or prior to winter dormancy. During heat stress or

drought, too much nitrogen-based fertilizer increases plant growth when little water is available. Plants may be more susceptible to winter injury if excessive amounts of nitrogen are applied prior to winter dormancy.

Many different types of fertilizer, some of which contain herbicides and insecticides, are available for specific times of the year. Application rates are located on the fertilizer bags.

Your lawn mower should be maintained in good mechanical condition with sharp blades. "Blunt blades tend to split the grass leaf rather than cut it straight across," Alex added. "The split grass leaf dies back and turns white, giving your lawn a streaked appearance."

Cut the grass when it is approximately two inches high but avoid removing more than 40 per cent of the grass leaf at any one mowing. "A trimmed lawn gives your house a well-groomed appearance, and you are better able to control the lawn's growth because water and

Lawn and from Inco

by Alex Gray and Ellen Heale

fertilizer are readily available to the root systems. If the grass is excessively long, it gives the lawn an unsightly appearance and can create disease problems."

Short grass clippings decay rapidly and do not necessarily require removal from the lawn once it has been mowed. Excessive clippings must be removed to prevent disease development. Avoid cutting the lawn on a wet day for two reasons. First for the obvious safety hazard and secondly wet grass could spread disease to the rest of the lawn.

Watering the lawn in the morning minimizes disease problems. It doesn't have to be watered every day but it should be watered enough to moisten the entire root zone, a minimum of one inch per week. A home sprinkler remaining in one location for four to eight hours will meet the weekly watering requirement.

Guide to Home Landscape Maintenance

Soil test

- sample garden, shrub bed and lawn soil to determine lime and fertilizer requirements.
- sample can be sent to the Department of Land Resource Science, University of Guelph.
- sample kits and further information are available at the Ontario Ministry of Agriculture and Food office, 1414 Lasalle Blvd., Sudbury.

Spring cleanup

- raking the lawn to remove debris such as decaying leaves, grass clippings, sand and gravel reduces potential disease problems.

Liming of soil

- if, as a result of a soil test, the soil pH level must be raised, use pulverized agricultural limestone.
- the approximate rate is 60-80 pounds per 1,000 square feet.



garden tips agriculture

Tree and Shrub Maintenance

Staking trees

- check the stake periodically to make sure the stake, tying ropes and/or wires are not biting into the bark.
- stakes usually can be removed two years after planting.

Cultivation

- cut a circle out of the sod around the base of the trees to prevent nicks from lawn mowers or trimmers.
- keep shrub beds and edge beds free of weeds to preserve shape.

Pruning

- to maintain trees and shrubs in a healthy condition and desired shape, remove all dead or damaged branches; cut away all diseased wood.
- pamphlets are available at the Ontario Ministry of Agriculture and Food office.
- remove crossing or rubbing limbs and suckers to give the tree a clean, open appearance.
- prune deciduous trees in late winter, except maple and birch which should be pruned in early summer to avoid bleeding; in the spring flowering shrubs should be pruned soon after they have flowered; shrubs that bloom in late summer or fall should be pruned in early spring.
- prune to an outside bud; maintain a wide rather than a narrow branch angle when pruning; cut close to the main branch or stem — do not leave a stub; undercut large branches first so the weight of the branch will not cause the bark to peel or split; prune hedges wider at the bottom than at the top.

Changing grade

- do not add soil over trunk or roots of trees.
- maintain the original soil level to approximately half the spread of the foliage.
- if lowering the grade, maintain a



Al Patterson of Lively, left, obviously knew the secret of maintaining a healthy lawn when he was awarded the A.L. Gagnon Memorial Trophy for the Most Improved lawn in Lively by Bill Tresize. Bill, a former summer student, donated the trophy to Inco's agricultural department in memory of Lorne Gagnon. Bill and Lorne worked together mowing lawns in Lively until Lorne's untimely death in an auto accident, some 15 years ago. Since that time the trophy has been presented to the person with the most improved lawn in Lively as chosen by the Inco agriculture department.

raised bed around the tree.

- when filling or raising the grade, build the tree well.

Fertilizing

- the quantity varies with the natural fertility of the soil and fertilizer used.
- dig in well-rotted manure for shrub beds (be careful of plant roots) in the fall, every two years or as required.
- to fertilize in the spring, use 5-10-15 or 5-20-10 fertilizer (the numbers represent the levels of nitrogen, phosphorus and potassium in the fertilizer) at the rate of one to two pounds per 100 square feet.
- for evergreen or deciduous trees, use 5-20-20 fertilizer.
- for flowering or fruit trees, use 9-5-7 fertilizer. In the spring drill or punch holes 15 to 18 inches deep for the fertilizer or pound in fertilizer stakes, up to the outer one-half or two-thirds of area covered by the spread of branches and slightly beyond.
- in the fall, water evergreen trees and shrubs well. Wrap them with burlap to protect them from road salt spray and winter winds.
- also in the fall, wrap the tree trunks with plastic guards to protect them from mice.

Disease, insect and weed control

- identify the source of the problem, then seek information and assistance on control measures from the Ontario Ministry of Agriculture and Food and the Ministry of Natural Resources.
- depending on the problem, control measures may be necessary.
- in lawns, it is necessary to treat white grubs, sod webworms and cutworms.
- in trees and shrubs, treat birch leaf miner, aphids, the spruce budworm, etc.
- reduce disease problems with proper sanitation procedures.
- dense, healthy turf is the best protection against weed problems.
- reduce weed problems with chemical herbicides.
- apply any pesticide, insecticide, fungicide and/or herbicide according to the manufacturer's directions. Use proper safety protection equipment such as rubber gloves, mask, rubber suit, etc.
- avoid spraying on windy days.
- do not apply pesticides in the same sprayer used for herbicides.
- store chemicals in a safe place; destroy the container when it's empty.

Family Album

Family Album Photos

If you are an Inco employee and would like your family to appear in the Family Album section of the Triangle please let us know by calling 682-5425, or send in your name to the address on the masthead.



A 17 year veteran of Inco service, Dick Corkum is a packer in the foundry additive plant at the Port Colborne nickel refinery. During his off hours, he enjoys working in his fair size vegetable and fruit garden where he grows everything from tomatoes to raspberries. He particularly likes barbecuing and does it outdoors year-round. Charlotte, his wife, works part-time for the Niagara South Board of Education and likes sewing and knitting in her leisure hours. Rod is a student at Niagara College, works part-time in a department store and enjoys photography as a hobby. Lisa is a grade eight student at McKay Senior Public School, a pathfinder and likes swimming.



Doug Jeffrey, an electrician at Stobie mine, has been working for Inco for 11 years. He is shown seated with his wife Joan, and their three boys, from left, Kevin, 1, Daniel, 4, and David, 6. The family pet, a miniature schnauzer named Sailor, also posed for the Triangle camera. Joan has taken up calligraphy and leatherwork as a hobby, while Doug works with young boys at All Nations Church.



Sonny Mukherjee, environmental co-ordinator in Copper Cliff, and his family enjoy sports. They are involved in competitive swimming, long distance running and tennis. Seated with Sonny are his wife Elizabeth, and from left; Robert, 14, Jeffrey, 4, and Natalie, 13. One of the family's favorite hobbies is reading — and the books aren't hard to find because Elizabeth is the librarian and administrator at the Walden Public Library. The family also goes camping occasionally, but most holidays are spent traveling.

LOOKING BACK

THROUGH THE PAGES OF THE TRIANGLE

May, 1937

The May Triangle of 1937 reported the course of events at the first annual Inter-Plant First Aid Contest for "the new R.D. Parker Shield." Teams from Creighton, Coniston, Frood and Copper Cliff vied for the honors.

Copper Cliff proved victorious with a squad consisting of Elliot Lawson (captain), Tom Gladstone, Wes McNeice, Gordon Guthries and Nathan Crawford (substitute). The new Parker Shield had not returned from the engravers in time for the presentation but R.D. Parker was on hand to present the men with individual medals.

Tom Gladstone had, a few days before the competition, proved just how invaluable first aid training was. He saw a woman get struck by a car on the Coniston Road. He was able to administer first aid and give the correct diagnosis of her injuries when she was taken to a doctor.

Other May events:

May, 1949

The first basketball championship in Port Colborne's history, the Ontario Intermediate C crown, was won by the Inco team at the Inco Recreation Club. The Incoltes rebounded from a ten point deficit to take the two-game total point-series from Port Hope.

Members of the victorious Incos included: Holmes, Missett, Favero, Columovich, Rajczak, Nevar, Horvath, Karpincick, Buffa, Smyth, Richardson, Riou.

May, 1953

In an article about the purchasing department, the Triangle detailed a portion of Inco's shopping list to give readers some idea of the millions of dollars spent on supplies for the entire operation. It included: 283,000 bags of cement and 60,000 yards of gravel, 30,000 tons of steel for drill steel, punch bars, grinding rods and balls, 545,000 tons of coal and 120,000 tons of furnace coke, 10,000 carats a month of industrial diamonds for drill bits, 600,000 feet of wire rope for small slushers, 39,000,000 feet, or 1,500 carloads of Ontario and British Columbia lumber and timber, \$540,000 worth of electric wire and cable, 384 carloads of explosives, \$653,000 worth of rubber belts and hose, 7,000 kegs of nails or enough for 18 carloads, 11,000,000 gallons of fuel oil, and 12 car loads of welding rods.

May, 1968

The company announced a \$31,000,000 development of a mine and concentrator at Shebandowan, 50 miles west of Thunder Bay. The Shebandowan property was acquired in 1937, but only small scale drilling was undertaken until 1965 when activity intensified. Diamond drilling outlined a medium-size ore deposit with a nickel-copper content similar to that in the Sudbury District.



1949 Inco team captures Ontario title.

PEOPLE



The First Lively Boy Scout Troops won the annual Sudbury and District Boy Scout First Aid Competition held recently at Agincourt Public School in Sudbury. Four area scout teams participated in the competition which tested the troops' first aid knowledge both in written and practical applications. Members of the winning team are front, from left, **Danny Larose, Patrick Kirwan, Raymond Withers, Brian Stewart and Parli Sudjarwo**; back, from left, coach **Hayes Kirwan**, an Inco plant protection officer, scout leader **Peter Larose**, a maintenance mechanic at Creighton six shaft and **Wes Stewart**, a stationary engineer at the Copper Cliff nickel refinery.

The members of the drill fitter crew at Creighton nine shaft are a proud bunch as they near 1½ years without a lost-time accident. The crew are, back, from left, **Gordon Austin, Keith Ferris, Doug Hirtle, Harry Head, John Pinylo, Fred Jones, Henry Specht and Lucien Tessier**. Front from left, **Joe Smith**, foreman **Bill Gagnon, Bob Peacock, Mike Bedkowski, Sam Crispo**. Absent from photo was **Jack Ferris**.



This crew at Levack mine has recently completed six months without a medical aid. They are, front, from left, **John Breton, Come Cassivi, Andy Loyer**, mine foreman. Second row, from left, **Cal Carmichael**, safety foreman, **Denis Trottier, Emile Noel, Al O'Bumsawin, Marcel Ricard, Leo Carriere, Cliff Harrison, Rod Simard**. Back, from left, **Conrad Loyer, Jack Noel, Lucien Montpellier, Jack Poirier, Vince O'Reilly, Graham MacDonald, Stan Snider**, general foreman, area two, **John Levesque, Brian Faragher, Bob Pitura, Isaac Harnish, Reg Laroche, Larry Lacombe**.



PEOPLE



Joe Rossi of central services is seen here giving the gift of life for the 50th time. **Carol Tataryn**, a clinical assistant, supervises the operation. Red Cross officials are particularly happy to see Joe come into the clinic because they find his blood rather special. They have been able to identify all the antigens in his blood make-up therefore giving them a rare and useful tool in the laboratory. Joe's blood, among other things, is used to determine which antigen is being rejected by certain recipients of transfusions. When the antigen is identified, a blood type without the troublesome antigen is administered to the patient. Joe's blood is also used for transfusion purposes.



The Centre des Jeunes Social Dancing Club held their annual Dance Festival recently at the Caruso Club which proved to be a great success with some 500 people turning out for the performances.

This group, members of the Centre des Jeunes Social Dancing Club, put on an impressive five minute display of dancing skills. The group incorporated different dances in their routine including a Viennese waltz, a tango, rock and roll, and a rumba. Shown here from left, are, **Denis and Suzanne Methot** — Suzanne is a clerk stenographer in Safety and Plant Protection, **Roger and Nicole Richer** — Roger is a storeman at the Iron Ore Recovery Plant, and **Roland and Nicole Brault** — Roland works at Froid mine as an underground switch conductor.



During the month of March the Canadian Red Cross paid two visits to Stobie mine where blood donor clinics were held. Here, **Vicky Way**, a clinical assistant, gets a blood sample from the finger of **Oscar Gionet**, a driller at Stobie.

PEOPLE

Twenty teams from Creighton mine participated in the second annual Creighton Mine Employees Curling Bonspiel recently at the Copper Cliff Curling Club. Some 80 people had the opportunity to vie for top title. Although only four men made it to the top, no one was a loser because all players received a prize for their efforts. The winning team included pensioners **Fred Buchy**, skip; **Hap Tommasini**, second; driller **Clifford Leishman**, lead; and Stobie mine drilling coordinator **David Slobodian**, third.



Garnet Phillips, **George Janicki**, **Bill Lockman**, **Graham Ross**, and **Walter Chomenky** appear to be having a difficult time determining which rock is closest to the center of the house. Garnet thinks it's the black stone while George seems to think it's the white.



Look out everybody, here comes the cowboy curler! When **Gordy Vigneault**, motorman, hits the ice, the game really begins. With his striped sneakers and cowboy hat, he may not have won the game, but he probably did win a few chuckles.

A few of the competitors don't appear to enjoy the bitter taste of defeat too much! Situated here, from left, are **Leo Hayes**, **Bud Meaden**, **Al Chenier**, **Ed Knezacek**, and **Louis Ruel**.

PEOPLE



Employees at the Copper Cliff nickel refinery recently held their annual Spring Dinner Dance at the Club Alouette. In addition to an enjoyable meal and dancing, there was also a champagne hour which is fast becoming a tradition at the refinery's dances. In photo above, electrical apprentice **Mike Forget** and his wife **Aline**, and **Laura Mitchell**, office supervisor at the refinery with husband **Bill**, an electrician, appear to be enjoying a good laugh over a private joke. In photo below, **Jeanne Taillefer**, maintenance foreman **Lino Antoniazzi**, and maintenance clerk **Lillian Landry** sell a string of tickets for refreshments to **Gerry Labre**, a feed prep operator.



While on a speaking tour of Northern Ontario, **Norval Richards**, former dean of the agricultural college at the University of Guelph, took a different kind of tour at Inco Metals' underground and prototype research projects. At the 4,000 foot level at Creighton nine shaft (above) **Norval Richards**, left, discusses the technique of germinating plants underground with **Tom Peters**, Inco's agriculturist. In the prototype greenhouse (below), Inco's horticulturist **Ellen Heale**, left, explains the workings of the greenhouse to members of the tour party, second from left, **Norval Richards**, **Walter Schaefer** and **Ernest Brown**. Other members of the tour party in background are, from left, **Robert Runciman** and **Tom Peters**.



Suggestion Plan Awards

During the first quarter of 1981 the suggestion plan paid awards totalling \$32,275 on 353 suggestions. The single largest pay out, \$3,785, went to Harold Koivula of the copper refinery for his new design for tankhouse bus bar lock bolts. The company realized first year savings of \$97,860 on adopted suggestions. The average award for accepted suggestions was \$91.43.



Harold Koivula
\$3,785



Steve Marinich
\$1,460

Major Winners

- \$3,785** **Harold Koivula** of the **copper refinery** earned the top award in this month's suggestion plan for his idea of a new design for tank-house bus bar lock bolts. With Harold's innovation of having the bolts threaded into the back flange plate rather than being welded, considerable efficiencies are being realized when the time comes to change these bolts. No longer do anodes or cathodes have to be removed, there is no need to take the bus apart, no crane is required and the power is down for only a short time, which wasn't the case before Harold's great idea.
- \$1,460** Better butterfly damper valves sent a healthy cheque to **Port Colborne's Steve Marinich**. Steve built twelve of these valves from waste and salvaged material for installation in the process vent system. His butterfly valves proved to be superior to the purchased P.V.C. valves thereby saving a lot of money.
- \$1,005** Finding that scooptram compressors mounted on the blower housing with an adjustable pulley was not only too difficult to change but also promoted damaged housings when pulleys were adjusted or the engine vibrated, **Nash Taha** of **South mine** offered an alternative. Mount the compressor on the frame above the alternator along with slotted base holes to eliminate the adjustable pulley, Nash advised. This, it was found, prevented broken fan housings and damaged compressor pulleys.
- \$685** **Bob Horner** of **Little Stobie mine** proposed that Jarco ST5 bucket arm inserts be removed and replaced with enlarged inserts with standardized ST4 bucket arm bushings. This proved to decrease considerably the machine's down-time and maintenance costs.
- \$500** The rapid rate at which oil lances in the FBR were plugging up and deteriorating inspired **Nino Narduzzi** of **matte processing** to come up with an improvement. He recommended that a "tee" be added to the lance in place of the 90 degree elbow, along with a check valve and an airline. Nino foresaw, quite correctly, that the life of a lance could be extended significantly and costs thereby lowered, with air pushing oil through the lance.
- \$490** **Henry Roy** of **Coleman mine** came up with the idea to convert the Jenny steam cleaner from a portable unit to a permanent installation at wash bays underground. This eliminated wear and tear the cleaner suffered as it was hauled to and from the surface.
- \$150** A method of strengthening launder piston rods earned **Roger Landry** of the **nickel refinery** some extra cash. With the rods lasting longer, costs have been reduced.
- \$150** **Bernard Forestall** of the **nickel refinery** thought a power device, such as an electric impact wrench or an air drill, should be installed on the hoist at the no. 1 reactor in the pressure plant and utilities building. This was found to be not only a labour saver, but also a safer way of operating the hoist.



Nash Taha
\$1,005



Bob Horner
\$685



Nino Narduzzi
\$500



Henry Roy
\$490

- \$150** **Rino Soucy** and **Doug Ashick**, both of **Levack mine**, collaborated to come up with faster means of recharging the batteries of Jarco scoops. Rather than suffer a loss in production and manpower while waiting for a mechanic to repair the machine, they suggested that a Sunnysdale alternator, driven by an air motor, be used to recharge batteries.
- \$125** In order to stop the boom assembly on the no. 416 Unimog from "bottoming out" and to prevent its coil springs, shocks and frame from breaking, **Tom Boyd** of **Stobie mine** advised that the shocks and springs be removed and solid mounts be installed.
- \$120** **Raymond Fortin** of **South mine** suggested that the Wheaton gun jet assembly be replaced with a new gun jet nozzle for washing mobile equipment. The new nozzle is less expensive than the Wheaton gun jet.
- \$115** A proposal by **Clayton Madore** of **Frood mine** to put the Amax loader on a rubber wheeled cart, was found effective in preventing damage while being transported.
- \$115** When he found a hydraulic press control handle to have no neutral position or a position indicator, **John Krnich** of **divisional shops**, thought of mounting a spring on both sides in order to allow the lever to be pulled back into a neutral position. This, along with an arrow welded to the handle to indicate up, down or neutral positions, permitted safer handling of the press.
- \$105** **Boris Lariviere** of **Creighton mine** found the removal arrangement of the drop chute to be too awkward, so he suggested it be changed. Now, when repairs are being made, things run more smoothly and more safely.
- \$100** **Eugene McGregor** of **South mine** suggested that water fountain valves be used on soap dispensers to promote a steady, strong flow of soap. Because suppliers no longer manufacture the appropriate valves, Eugene's innovation saved having to change the entire dispenser.
- \$100** Relocating the skip dump camera and lights was a thought put forward by **Ronald Richardson** of **Frood mine** when he noticed the view getting obstructed by wet muck. Now employees can plainly see the slide and muck bin.
- \$100** **Normand Bernetez** of the **Iron Ore Recovery Plant** submitted the idea of installing a bracket to support the repulp feed line tee. This keeps it from slanting and wearing away on one side. Cost savings in equipment and down-time have been realized.
- \$100** It used to be that repair work on a crane would have to wait until extension cords and portable lights were brought up to the crane. There is no longer such a wait after **Lou Moulaison** of the **smelter** suggested that extra lights be installed in the panel room and cab of the crane.
- \$100** **Joe Fabbro** of **Port Colborne** suggested that the by-pass switch on no. 17 crane controls be relocated. Now when a craneman has to lift higher than the switch limit he will no longer need the help of a second individual to activate the by-pass switch.



Here, from left, Georgette Mitchell of Carl A. Nesbitt School in Sudbury, Linda Morin of College Street School in Sudbury and Barry Silmsor of the Ottawa Board of Education, reinforce their understanding of mining exploration principles by trying to locate a piece of metal (representing an ore body) buried in a sandbox using a magnet.



Part of the hands-on simulation techniques explored during the underground workshop included this clever simulation of a furnace using plastic containers, colored water and oil. Here, Gerry Laporte of the program department of the Carleton Board of Education, practices tapping the "furnace".

Teachers become students

Forty teachers from across Canada attended the Identity Curriculum Research Project mining workshop in Sudbury last month.

Initiated four years ago in British Columbia, the project seeks to introduce teachers to methods and approaches of making elementary students aware of the mining industry in Canada. It is co-sponsored by the Faculty of Education of the University of British Columbia, the Faculty of Education of the University of

Toronto, and the Canadian Mining and Metallurgical Foundation.

The teachers were introduced to the world of mining, the mysteries of the Sudbury Basin and its ores and efficient, effective, enjoyable ways of teaching aspects of the industry to youngsters.

Jim Darrach, project co-ordinator, stressed the importance of acquainting students with mining, its role in the Canadian economy and its career possibilities.

He notes that the mining industry was the first industry to co-operate the educators to develop a comprehensive program for elementary school children. In a time of declining enrolments when fewer tax dollars are becoming available for educators, the mining industry is helping school boards across the country teach kids about itself, Jim says.

"It makes our kids more aware of the world of work," he explains. "I know for years industry has been crying that kids were coming out of school unprepared for the world of work." The Identity curriculum project is helping to change that.

The project has attracted international attention. Jim says he has received letters of inquiry on the program from all over the world. Presently project officials are collaborating with educators from the United Kingdom on establishing a program for secondary school students.

Inco Metals Company sponsored 10 teachers attending the four day workshop at the Sheraton Caswell Motor Inn.



Jim Darrach, project co-ordinator, center, demonstrates to the teachers gathered around him, how to use a geological map of the Sudbury Basin in a classroom situation.



Census

Count yourself in on June 3



June 3, 1981 is Census Day in Canada — the day when you and more than 24 million other Canadians will be asked to count ourselves in by filling out a census questionnaire.

The census is a 315-year old tradition in Canada and we are required under the law to complete the census form. All information you provide will be kept strictly confidential, but combined with data from others it helps to form the complete picture of Canada needed at the start of the 80s. Your participation will ensure a complete and accurate 1981 Census that will benefit all of us.

What the Census tells us

Facts and figures gathered on June 3 will create a pool of comprehensive information about Canada and Canadians that will help us better understand ourselves and our society.

For example, past censuses have shown that a smaller proportion of Canadians are forming traditional two-parent families, and those who establish families are waiting longer to do so. The 1981 Census is expected to confirm this trend, as well as the trend to smaller families, with fewer than two children as the norm.

The 1981 Census likely will show that families in eastern Canada are larger on average than those in central and western Canada, and families in rural areas are larger than those in urban areas.

Census information will also provide an up-to-date picture of the marital status of Canadians. Although marriage has lost appeal for some, more than 90% of Canadians will marry at least once. The rate of divorce, however, in 1979 was

almost twice as great as it was at the last decennial census.

We will need accurate and complete figures from the June 3 Census to provide data on critical issues such as the status of women in the Canadian work force. For example, although more women have joined the work force over the past decade, do the majority still occupy clerical or lower-paying jobs? Will there continue to be a wage gap for similar work performed by men and women?

When information from the June 3 Census becomes available, we will learn what changes have occurred in this and other important social and economic trends. The data from the census, our census, will enable us all to see more clearly what must be done to improve equity and opportunity for all Canadians.

Welcome to Inco



CIL officials went on tour of the acid plant with Inco representatives. Members of the tour party are from left, Ken Aiken, manager of sulphur products, industrial chemicals division of CIL, Winton Newman, Inco's Ontario division president, Vance Ward, vice-president and general manager, industrial chemicals division of CIL, George Nowlan, manager of the IORP, and Bill Carson, works manager of the former CIL plants.

It was a farewell visit and a welcome visit all in one.

CIL officials bid farewell to their employees at the CIL acid plant as the plant recorded its 50th anniversary as a production unit of the Copper Cliff works.

The CIL employees were welcomed to the Inco family by Ontario Division president Winton Newman and George Nowlan, manager of the Iron Ore Recovery Plant.

"We are very happy to have the new employees join the Inco work force," stated George Nowlan. "They are very capable people and will perform a useful function in integrating the operation of the Iron Ore Recovery Plant and the Copper Cliff smelter flash furnace in recovering sulphur dioxide in the form of marketable products."

A Unique Baseball Experience



A training clinic for players 10
to 18 years and coaches

**SATURDAY and SUNDAY
MAY 30, 31, 1981
at LaSalle Sports Complex**

Registration deadline May 16, 1981

*For information and registration
contact your baseball association or
Inco Public Affairs office 682-5427.*



GRASS ROOTS BASEBALL REGISTRATION FORM

(Registration deadline May 16, 1981)

Please Print (Use Separate Form For Each Participant)

Name _____

Address _____

Telephone _____

Please enrol me in (check one) Grass Roots "A" (10-13 yrs.) Grass Roots "B" (14-18 yrs.)
 Grass Roots Coaching Program

I have enclosed a cheque or money order made payable to: **Grass Roots Baseball**
in the amount of \$3 - player \$5 - coach

I hereby release Inco Metals Company, the City of Sudbury and participating baseball leagues and associations, agents, officials or anyone connected with Inco Grass Roots from any loss, injury or damage whatsoever incurred from my participation in, or presence at, said program.

Signature of participant _____ Parent or Guardian Signature _____

(If participant under 18)

**Enclose Cheque or Money Order and Mail to: GRASS ROOTS BASEBALL
Public Affairs Department, Inco Metals Company, Copper Cliff, Ontario P0M 1N0
Money will be donated to charity.**