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Now, according to the rules...

Laws, orders, statutes, regulations. In Canada only one point of agreement: the rules are plentiful

by Alastair Lawrie/drawings by Trevor Hutchings

Late last year, Canada was launched into a searching, if somewhat speculative, examination of the federal government's intentions in the matter of controlling the economy. Prime Minister Pierre Trudeau's musings during a television interview about the course of Canadian society created an uneasy feeling among many people that more controls were on the way. In industry there was also a measure of mystification: if there were to be more controls, where would they be put? Business librarians glanced anxiously at their sagging shelves. Where could one more rule be inserted? Was it possible that some aspect of industry's activities had slipped past the scrutiny of the people with clipboards, ball-point pens, and encyclopedic knowledge of standing orders?

Late the number of such inspectors, examiners, adjudicators, assessors, and referees has been growing at a cracking rate. In 1970, the federal public-service payroll numbered 379,000. By March 31, 1976, it had grown by about 23 percent to over 465,000. One man who watches this accumulation of power with some misgiving is Michael J. Trebilcock, a University of Toronto law professor. Last September he laid some of his anxieties before the Institute of Public Administration in a 49-page paper entitled, Winners and Losers in the Modern Regulatory State — Must the Consumer Always Lose? Trebilcock challenged the prevalent myth that the Canadian economy is largely unregulated. In fact, as he revealed, the federal government alone has created more than 100 regulatory agencies; most provinces, he said, have more than 50. Bureaucracies are rising like yeast on all sides, ostensibly to administer the proliferating rules of the organized society, but also possibly to create more and more of the regulations that require their presence.

An example might be the Anti-Inflation Review Board. At its inception in October, 1975, Finance Minister Donald Macdonald predicted that it would have a staff of no more than 200. By mid-June it had 853. Also, the provinces are getting the idea. In British Columbia in 1970, there were 27,790 public-service employees, by 1975, there were 39,301. Fatter budgets, burgeoning civil services, and thicker statute books all tell of the provincial push for a place in the sun; that is, for more power to call the tunes for society.

To some Canadians, the benefits of all this regulation are not readily apparent. Last winter the Canadian Federation of Independent Business conducted 3,284 interviews among businessmen. It asked this question: "What is the single most important problem your business is facing today?" Heeding the list: government regulation and paper work. As Jean-Marc Lalonde, a businessman in Alfred, Ont., puts it, 50 miles northeast of Ottawa, says: "I am expected, inspected, disrespected, suspected, dejected, examined, reexamined, commanded, and compelled until I provide an inexhaustible supply of money for every known need and desire or hope of the human race."

Imperial Oil Senior Vice-President W.J. Young gave an indication of what all this means to a company that at last count was subject to at least 375 federal and provincial laws administered by 275 regulatory agencies. "In one year," Young said in a recent speech, "Imperial made 1,693 separate price submissions to just one provincial agency. In terms of time and money, the cost to the industry and consumers of this regulatory nightmare is frightening."

University of Toronto economist Douglas Harvie, formerly a senior civil servant in the treasury board, attests to that in general terms. "Entrepreneurship," he says, "is essentially becoming a matter of dealing with governments. In small firms, once they have figured out corporation and personal tax, Canada Pension Plan, Ontario Health Insurance Plan, foreign-takeover regulations, tariffs, environmental regulations, and local bylaws, there isn't much time left to carry on business."

The forces that impel governments toward more and more regulation of the economy are not always readily apparent, but it seems likely that they include responding to a perceived public demand. York University President Ian Macdonald, a former deputy treasurer of the Ontario government, says it this way: "We have unreasonable expectations for governments in dealing with our economy."

Many industrialists and economists share the conviction that regulation, while understandable in intention and valid in principle, carries with it certain problems: that it may have a suffocating effect on innovation and may sap the vitality of the competitive forces of the economy, driving costs up. As Claude Lestibier, who headed a royal commission on petroleum-products pricing in Ontario, reported last June: "In the interests of consumers, Ontario should avoid the
establishment of an agency to regulate prices." Isbister said that prices would be increased under regulation.

A U.S. study in a July, 1975, issue of the Journal of Political Economy offers further evidence. The authors, Richard A. Posner, of the University of Chicago Law School and National Bureau of Economic Research, claimed that the rules of regulations increased prices in a number of cases. For example, Posner demonstrated that physicians' services cost 40 percent more than they would without regulations and eyeglasses 34 percent. He calculated that regulations had increased the price of oil by 65 percent (before the Organization of Petroleum Exporting Countries was set up) and airlines 66 percent.

Regulation has its critics even among regulators. An excerpt from the February, 1974, final report of the Food Prices Review Board here says that the monopolistic supply management marketing board concept is inappropriate in the new and changing circumstances facing the food industries. The report also criticizes the measures ... to be considered by the government to replace marketing boards whose present production and pricing policies permit inefficiencies and market distortions unnecessarily.

No one disputes the need for regulations if society is to function, but the increasing number of them has become a source of concern to many. One of the likeliest critics of regulation is Carl Beigie, executive director of the C.D. Howe Research Institute of Montreal. His objection is that the increasing number of ... "a proliferation in the government regulatory apparatus ... may have produced windfalls for the accounting and legal professions," he wrote in RIA Cost and Management magazine in October, 1975, "but at the expense of the growth and efficiency of the overall economy.

Belgïé's opinion is echoed by John Bishop Ballen, senior partner in a Calgary law firm and an authority on petroleum law. Writing in Nickie's Daily Oil Bulletin, he cites prorating as an obvious example of the need for regulations. Under the prorating scheme established by the government in the very early days of the western Canadian oil development, all producers had a right to a proportionate share of the market and thus were able to survive. Indeed, say some experts, if it hadn't been for this type of regulation, the industry might have become a victim of its own prorating.

Still, you can have too much of a good thing, and a subtle change in tone enters Ballen's discourse as he continues: "There has been an explosion of legislative activity since last September [1973] and it must be said that a great deal of it seems to be designed not so much to deal with the energy 'crisis' as to establish the position of the combatants in the federal-provincial confrontation and advance each claim to the spoils.

One imperial executive with broad experience in coping with regulations is Gordon Haight, a company vice-president and manager of Imperial's production department. His involvement in the oil or gas operation begins where that of the geologists and geophysicists ends, dealing with drilling the well, producing the oil, laying the flow lines, separating the water and gas from the oil, and processing the gas — in fact, making the crude and gas available and ready for the transportation people.

Haight has a generally high regard for the regulatory agency he first encountered years ago in Alberta. It is now the Alberta Energy Resources Conservation Board. Haight describes it as a model regulatory agency, which had profited by the experience of corresponding bodies in the United States. "You could go to public hearings and come up with changes if necessary," he said. "It was detailed enough to assure citizens that fuel wasn't being wasted, flexible enough to take into account the economics of the situation, and realistic enough to understand the technical problems.

The Alberta Energy Resources Conservation Board is only one of a number of regulatory agencies operating in the province, or in the case of an oil company, as a producer. For needs access to an individual's property, it can negotiate and try to obtain a surface lease. Occasionally the owner will refuse and it is necessary for the appropriate government board for a right of entry. The case will be decided by referring to regulations governing Alberta rights of way. There are 112 of these.

In fact, there is a standard reference work of Alberta's oil and gas statutes and regulations. It doesn't contain the whole of the statute law, but it does record all the statutes and regulations of general application that need to be referred to most frequently in the ordinary daily course of the activity. In addition, there are three phases of the business: large, medium, and small businesses. They are under 5,739 different headings, with as many as seven subheadings. Another volume lists the common ones for federal lands: they add up to 1,037 under 19 headings. The total work, by lawyers David E. Lewis and Andrew R. Thompson, runs to six volumes, two of which are devoted to the gas.

There are business activities where controls lie on top of other controls like a Dagwood sandwich. For example, increased the price of crude oil, it does not produce products, requires the compliance of the Anti-Infestation Board (AIB) and the department of energy, mines, and resources, depending upon the nature of the request. However, in Nova Scotia, applications for price increases have to be another hurdle — the Nova Scotia Board of Commissioners of Public Utilities. And that board has overriding authority in Nova Scotia and does not recognize the decisions of the AIB or the department of energy, mines, and resources. Nor are the two systems compatible. The AIB and the department of energy, mines, and resources require justification based on national data; the province of Nova Scotia has an entirely different approach.

Last April, for example, Imperial indicated its intention to the AIB to raise prices on fuel products by no more than one cent per gallon to try to recover partially the increased costs of making, delivering, and selling. The board said it would not intervene.

Then another application had to go to the Nova Scotia board. It wanted further information. To answer Nova Scotia's 22 questions, Imperial's submission ran to 68 foolscap pages. Together the applications took the work of at least six people working full-time for three weeks. Then, on May 25, there was a hearing. In July, the Nova Scotia board granted an increase that was less than the increases previously sanctioned by the federal government. (The provincial extensions to the federal government's 45- day price freeze in 1975 are something else again. Four provinces added further freezes of their own, the longest — Ontario's and Manitoba's — extending the freeze by three months. The royal commission set up in Ontario to figure into petroleum-product pricing examined the time a freeze on product prices should last after a crude-oil price increase. It reported that a freeze could last 40 to 60 days would have been about right at that time in Ontario.)

Sometimes the rules are so vague that the industry is unsure what is expected of it. For example, when petroleum price controls were first announced by Ottawa in 1973, the government said that auditing regulations would be announced later. In the meantime, the industry went ahead on the basis of its best guess as to what the guidelines would say. When they were eventually announced — 10 months later — they were different than expected. In Imperial's case, the differences meant that two people had to spend two weeks reconciling them. As it turned out, Imperial passed the audit.

In the oil industry, regulations range from details of the design of a gas-station sign to the drilling of a well that may cost $20 million. They serve not just to give the government regulating power, but a good deal of information about the industry. Under these circumstances is it ironic that the industry is accused by some critics of operating in an atmosphere of secrecy, leaving the public and governments in ignorance. The fact is that government collects know more about the industry than any one company can possibly know.

Much of this information is confidential in that it is not divulged to other companies — in keeping with the competitive nature of the industry. But there are rooms full of the stuff in government buildings, pertaining to the industry's activities, in exploration in the Beaufort Sea to the design of oil spill-nuzzle in Toronto which, incidentally, is tested 8 different ways before it is put to use. Secrecy? Well, every single citizen may not carry a complete directory of what the oil industry wherever he goes, but he has access to it. His governments have enough information to choke a middle-sized computer. Naturally this includes the financial results of the companies' operations, which are audited by independent auditors and certified as accurate before submission to the tax authorities.

One Imperial official who was bold enough to plunge into the labyrinthine complexities of regulations in an effort to classify them is Douglas MacAllen, vice-president of corporate affairs at Imperial. "You can't put up a building, sell a gallon of gas, or put a tank in the ground without approvals on procedures and equipment all the way," he says. He discovered that, in the three years between Jan. 1, 1973, and Dec. 31, 1975, the oil industry was subject to 29 government policy directives (including new legislation), 18 new price regulations or orders, and 28 changes in tax and royalty arrangements, some of major significance. Three structural changes were introduced — marketing boards, commissions, and the like — and there were six cases in which governments became directly involved in industry operations through the creation of companies such as Petro- Canada or the Alberta Energy Company.

His effort to compile what he refers to as the "interfaces" of government and industry yielded a bulky paper for presentation to the Institute of Public Administration of Canada. The appendices, listing the industry associations that interact with governments, the agencies of government, and a list of approval procedures, ran to 20 foolscap sheets. He must have left something out, surely.

Alastair Lawrie is a member of the editorial board of The Globe and Mail, Toronto.
The signs of yesterday

They speak even as they fade

In those adolescent years of our towns and cities, walls used to have mouths. Setting up a new plant or store was an assertion of yourself, an act of faith, and it demanded witness. When you'd laid your foundations and raised your walls, you wanted to be sure that the world knew who you were, what you stood for, and what you had to offer.

City fathers had never heard of zoning laws and laid down only the pattern of streets. What grew up along the sidewalks was acknowledged to be strictly the business of whoever put it up. Along the Main Streets, those who could afford it piled up three storeys of brick and, if these stood adjacent to a one-storey neighbor or on a corner lot,

they also acquired a wall as a billboard.

The eyes of prospecting sign painters must have glistened whenever they spotted such buildings rising above Main Street. Storefront nameboards may have been their bread and butter, but blank sidewalks were something else, inviting boldness both in imagination and execution.

Erect in white coveralls on their frail gantries, the old sign painters could sustain excitement along Main Street for days as their grand design spread downward and outward over the raw red or yellow brick. Small boys on errands were lost for hours. Neighbor ing store owners despaired at keeping clerks behind their counters. Men who posted bills, slapdashing their pictures on billboards with daring adroitness, were mere tumblers in comparison to the highwire artists of the painted sign.

It was a performance partly of suspense, with no climax and no
responsive storm of applause. Act completed, the painters would quietly dismantle their scaffolding and pack it on the wagon with the brushes and paintpots, collect their fees, and journey on in hope of new blank walls. The message was their medium. Whatever glory it won reflected not on them but on whoever had hired them. Since then, advertising has grown from folk art into industry. Media campaigns turn out impersonal slogans and slick messages that, in the weather of mass response, are as ephemeral as the leaves on trees. Wall signs, however, had to endure against both weather and human whim. A few words uttered boldly, just enough to be caught and absorbed by the passing eye. A company or brand name inscribed broadly, maybe with a flourish but nothing too fancy. Some additional description or injunction if need be, but nothing so brash as to wear out its welcome in the community of Main Street. Familiar enough to become invisible, like the daily faces of colleagues and acquaintances. And suddenly mourned when they begin to disappear. — Val Clery
Lessons in survival. And at Outward Bound, a gift of human experience

by Paul Gressco

Alex Willis had survived. Slightly astonished, secretly delighted with himself, he'd survived the most merciless physical ordeal of his 18 years. He had donned cross-country skiis for the first time, strapped on a 40-pound backpack and, with five other men, skied for five days and nights in below-zero weather across 70 miles of mountain terrain in the interior of British Columbia. He kept falling in the snow; his wet socks would freeze to his boots. One night he was so tired he crawled awhile instead of walking. "Once when we were skiing along, I thought it was a nightmare and I wanted to be woken up out of it," Willis recalls. Later, after he suffered frostbite to one foot, a doctor told him he couldn't go on another three-day expedition into the mountains. Instead of rejoicing, he was wracked with disappointment.

What Alex Willis of North Vancouver underwent was part of a three-week winter course at the Canadian Outward Bound Mountain School near Keremeos, B.C. A second school, the Canadian Outward Bound Wilderness School, operates during the summer and fall in Ontario. Though the winter course sounds interminable, to say the least, if not unnecessarily cruel, it isn't. Willis was the only one of the students on that ski tour who suffered harm, and he admits that it was his own carelessness that led to frostbite. The lessons he learned on that trip seemed more than compensating for any pain he endured.

One lesson was that deceptively simple Boy Scout motto: "Be prepared." Making sure you tie securely the gaiters that keep the snow out of your ski boots, for instance. Or thoroughly drying your sleeping bag so it isn't as stiff as a board the next night. "You've really got to organize yourself," Willis commented after the trip. "I was hoping you'd learn that," his instructor said.

Another realization was that the mind can move the body beyond its normal, city-salt limits. Slogging a dozen hours a day across rock and snow, lowering himself down a ridge in darkness, even sliding out of a warm sleeping bag into the frozen mornings became enormous acts of will for Willis. "I was pushing myself past what I thought I could do," he says.

A lesson of another kind, no less important, was learning to accept others for what they actually are, not what their age or appearance suggests. Willis remembers resenting the presence of Jens Lorentzen, a 29-year-old bearded carpenter on the course. This guy's kind of old, he thought. What's he doing here? "At first I felt the age difference, but after about a week I could really associate with him. My pack would come apart halfway down the mountain and Jens would show me how to tie it. He'd ski behind me and know exactly the right thing to say, like, 'Remember the letters that'll be waiting for you.' And the last day he carried my shovel and sleeping bag. He's somebody I'll never forget."
The essence of Outward Bound is preparing for hardship, being tested under controlled conditions, and trusting others.

Alex Willis couldn’t complete his course because of frostbite, yet he did absorb the essence of the Outward Bound experience: preparing yourself for hardship, testing yourself under controlled conditions, and allowing yourself to trust others — with your life, if necessary. Boys and girls 16 and older and men and women into their 50s and 60s have been learning that philosophy in 32 Outward Bound schools in 16 countries since the first school opened on the west coast of Wales in 1941.

That school was an immediate response to World War II — in part, an attempt to train young merchant seamen — but it was born during the 1930s out of a movement in Britain to improve the fitness of youth. Kurt Hahn, founding headmaster of the rigorous public school Gordonstoun (which Prince Philip attended) started an athletically oriented summer school for nonskiers in 1940. The following year, with the financial support of shipowner Laurence Holt, Hahn launched the Outward Bound Sea School at Aberdovey, Wales. As Holt himself said, expressing an idealistic doctrine that endures in the schools today, “The training at Aberdovey must be less a training for the sea than a training through the sea, and benefit all walks of life.”

Other nonpolitical, nonprofit Outward Bound schools, open to anyone regardless of creed, color, or class, blossomed after the war — in Europe, Africa, Malaysia, Australia, New Zealand, and the United States. But not until 1969 did one flower in Canada, when a group of Vancouver business and professional men founded the mountain school, which now operates year-round. Then last year, under the directorship of Queen’s University education professors Bob Pich and Marguerite Kuennew, the Canadian Outward Bound Wilderness School opened with summer and autumn courses between lakes Superior and Nipigon in northwest Ontario.

The first school director was John Hassell, a rangy young British Army major who served with the tough Gurkha regiment and taught at the Royal Military Academy at Sandhurst. While he’d never been an Outward Bound instructor, he was a sailor, a pilot, a scuba diver, and a climber on Himalayan expeditions. Hassell later became Outward Bound’s Canadian executive director. He retired in 1976. As school director, he was succeeded by Geoff Evans and then Adrian Todd, both Englishmen who began to adapt the school to Canadian conditions.

The Canadian schools, Todd says, are looser, less military than the British ones, offering longer wilderness encounters, which require more reliance on the abilities of individual instructors. But the major difference is that the British schools have a high enrollment of management apprentices sent by companies as a mandatory part of their training. In Canada, as in the United States, students enroll voluntarily and, as Adrian Todd says, “Anyone who sends himself or herself to Outward Bound has an adventurous streak.”

The advantage of company sponsorship is that the expense of the course is subsidized. The cost in Canada can be high, though not exorbitant, considering that it includes food, lodging, and all equipment except rough clothing and mountain walking boots: from $225 for 10-day senior courses to $775 for the standard 20-day summer sessions (plus traveling expenses to and from the schools). But bursaries for the needy are available to pay as much as half the cost of tuition; last year 93 of the 740 students received them. Sponsors include grant-distributing groups like foundations, private companies, service clubs, and individual donors (who include the parents of three Outward Bound graduates who died in accidents after attending the mountain school). The Canadian Armed Forces sponsors male and female cadets and service agencies finance courses for troubled teenagers whose problems are kept confidential until they’re placed in a group with nine others.
The Canadian schools aren't restricted to teen-agers. Adults can take either the month session that's a mix of ages and backgrounds whenever possible (coeducational if the students are 19 or older) or a 10-day course that attracts working people. The instructors have trained employees of the Ontario corrections department, which works with juvenile offenders. They've tutored physical-education students from universities and colleges that offer credits for Outward Bound courses. Last spring, in the first course sponsored entirely by a Canadian company, they taught employees of André's Wines Ltd. of British Columbia, who volunteered to take a short session.

The common question is whether the average, out-of-shape, urban person is fit enough to survive Outward Bound. Well, as one instructor told me, roughly three-quarters of his students have no previous outdoor experience to speak of. Adrian Todd likes to tell the story of the very fat man who arrived at the school, having already shed 90 pounds in a crash diet. He couldn't finish the course, but he returned a few months later, still plump but another 30 pounds lighter, and that time he graduated.

The schools require of everyone a recent, thorough medical examination and forbid liquor and cigarettes during the course (though a little surreptitious smoking occurs). Todd's suggestion — and that of a middle-aged doctor who has taken two courses — is that a 40-year-old who hasn't exercised regularly should at least do some jogging or cycling for a month before attending; otherwise the first few days will be torturous.

They might be anyway. A favorite gambit of Outward Bound instructors is to ask their students, the day they arrive, to take a quiet walk with them. The walk suddenly turns into a fast sprint — the week I was at the mountain school observing, a class followed its instructor right up the scrabbly side of a hill. A patrol, as a group of five to 10 is called, usually has a run before every breakfast. I joined a patrol one morning as it followed a slight but sinewy instructor, John Warden, who took us the hard way across a wooden bridge, walking on the slenderness, rotting planks of the treacle under the bridge. By the run's end, my lungs felt as if they were seizing up. Warden assured me I'd be able to keep up within a couple of days, a challenge I never had a chance to take up on. The bridge crosses the rocky bed of the Similkameen River that runs behind the now comfortable camp of cabins. All around rise 6,000-foot mountains streaked with snow and studded with dark evergreens. The mountains become the Outward Bound laboratory where students learn the basics of climbing, skiing, snow-caving, first aid, avalanche rescue, mountain evacuation, map-reading, orienteering and — in a three-day, stay-in-one place solo with minimal food and shelter — the fruits of solitude. The surrounding rivers are summer classrooms to study elementary whitewater canoeing and kayaking. Occasionally the mountain school runs courses far from the base camp, as it did last summer when students spent 21 days on the rivers and mountains of the Crownest Pass region of the Rockies.

The success of the schools depends on the quality of the instructors. They're not working for the money — $600 a month plus room and board — but for the independence and the outdoor life they enjoy in their jobs. Their competence can be gauged by the astonishing fact that the most serious student injury in the mountain school's history has been a broken ankle. The four men and two women teaching last winter had a reassuring range of qualifications that included engineering and physical-education degrees and experience in teaching high-school students and juvenile delinquents.

The night I arrived at the camp, a patrol had just returned from a five-day mountain ski tour, the kid Alex Willis completed. They were wolfing a well-prepared meal of fish and chips. The day before, they'd traveled from 5 a.m. until 11:30 p.m., skiing by moonlight.

"There's not much technique involved in cross-country, but I found it very difficult," said Len Walls of New Westminster, B.C., a 31-year-old department-store salesman who'd never skied before. "Falling down and getting up is no problem, but when you've done it 10 or 20 times with that pack on your back, it's frustrating."

Doug Saunders, a 25-year-old Torontonian, agreed: "Even when you've done downhill skiing, as I have, when you put a 50-pound pack on your back, it's a problem. We ended up skiing a mile from camp today without the pack and it was like flying on top of the snow."

Yet despite its sheer exhaustion, the patrol was exhilarated at its collective accomplishment. "There's self-pride.
in there," said Brad Davidson, 21, of Pleasantville, N.S. "People find their limits and are a little broader than they thought.

"You really extend yourself," added Saunders. "And you feel the group is important." The group can never go faster than its slowest member, which was a comforting thought for flaccid 36-year-olds like me. I'd seen accounts of Outward Bound that suggested it was a bit brutal (a recent Playboy article was entitled, ominously, "Only The Strong Survive").

Unfortunately, Outward Bound seems doomed to suffer from the myth that its courses are too rugged for most men and women. As John Hasell once put it in a letter to a grad: "Isn't it difficult to convey to people the subtleties and complexities of the Outward Bound experience? One either makes it sound too tough, which frightens people off, or one gives the impression of being some peculiar religious sect that provides mystical experiences in the wilderness."

The quasi-religious image may arise from the school's insistence on inspirational readings each morning, which are normally as innocuous as an excerpt from a mountain climber's journal or a few lines on solitude by Kahlil Gibran. The truly spiritual side of Outward Bound emerges in the mandatory service day on each course when students might take elderly people for a drive or dig out a nearby resident's house from the mud of a flash flood.

Critics argue that these attempts at serving others are meaningless — and they might be for adults — but a recent follow-up study of teen-aged graduates of the British Outward Bound showed that the service days do plant some seeds. Basil Fletcher, a professor emeritus of the University of Leeds and a former professor of education at Dalhousie University, wrote in his study: "The schools cannot, for lack of time, do much more than give the students a glimpse of the importance of community service but, even so, the statistics show how often a window has been opened and as a result after leaving a course a student has sought for some opportunity to continue this.
sort of work. Certainly the inclusion of a little practical work of this kind does more than many uplifting talks.

Professor Fletcher, who studied Britain's Outward Bound skeptically, learned in his survey of 3,000 graduates that 80 percent had later found their way into some youth work. About 65 percent said they had continued to practise one or more of the outdoor skills developed at the schools. And most importantly of all, 70 percent of their adult sponsors reported a measurable rise in the grads' self-confidence.

Though it has an active grads' association with about 250 members, Outward Bound in Canada has never made a similar survey. But its files are thick with letters from former students brimming with thanks. One came from Gordon Hannay, a west-coast fisherman who'd attended the mountain school.

He wrote about the cold, wind-whipped March night he was aboard a sinking Gill-netter. As the boat listed and filled with water, he and his partner coolly prepared for the worst. After sending a distress signal, they dressed in their warmest clothing, donned lifejackets and large buoys they'd tied together, and agreed that if they wound up in the water they'd hold on to one another and stay by the boat as long as possible. They sat patiently on the bow, waiting and hoping, and before the boat disappeared, a rescue hovercraft plucked them from the water.

"The experience of sinking a boat was important to me," Gordon Hannay said in his letter, "because I saw how I reacted in a clutch situation, and how we survived. I thought I'd write and tell you this story, for I know for a fact that my Outward Bound experience prepared me for such an event. I have to come back up to the school and walk in the forests and mountains again. It's been a long season at sea."
For coal, an increasing role. And new interest by Imperial

BLACK POWER

by James Hickman

There is something warmly reassuring about Canadian coal. As reserves of conventional petroleum and natural gas diminish in the western provinces, Canada’s deposits of coal, sparsely spaced at each end of the country (see buried bituminous bookends), represent a potential store of energy for the future. Beneath the surface of Nova Scotia, New Brunswick and, to a far greater degree, British Columbia, Alberta, and Saskatchewan lies the potential coal equivalent to 450 billion barrels of oil, according to the federal government.

Though there are several kinds of coal, it can be broadly categorized by its two most important uses. Thermal coal is a fuel that could be used in large industries—cement and pulp and paper—and by large power companies to produce the steam that spins turbines to generate electricity. Metallurgical coal is converted to coke, which is used in making steel.

For more than two decades, coal’s future seemed foggy; its role as an energy fuel was greatly reduced from what it had been in the first half of the century. Coal had been overtaken by oil and natural gas, which were easier to handle, cleaner to burn, and cheaper to move around. But higher world prices for energy and depleting proven reserves of oil and gas have changed the outlook for coal. Its future looks bright indeed, especially considering its abundance. In Canada, there are proven coal reserves of 98.4 billion tons, according to estimates by the Alberta Energy Resources Conservation Board.

Now coal can compete with other fuels. Says Norbert Berkwitz of the Alberta Energy Resources Conservation Board: “We’re at the point where we’ll be seeing more and more heavy industry switch to coal.” Added Phillip Read, a mining economist in Ottawa who is chief of transportation and marketing in the federal government’s department of energy, mines, and resources, “It is likely that industries such as cement and pulp and paper will be considering coal as an alternative to natural gas as the price of natural gas rises.”

So coal will play an increasing role in our lives in the future. According to federal-government estimates, coal will supply as much as 10 percent of the country’s energy needs by 1990. Last year, it supplied only seven percent.

The federal-government publication An Energy Policy for Canada says that the resurgence of coal demand is placing considerable strain on an industry that is only now recovering from several decades of depression during which it lost much of its management expertise, skilled labour and capacity to produce. Since the beginning of its recovery in the late 1960s, the industry has faced the necessity of rebuilding itself from a narrow residual basis of these human and material assets.

Imperial Oil has been involved with coal in Alberta since 1971, when it acquired leases to explore in the areas around Wabamun and Swan Hills. It began exploring for coal in January, 1972, and now has leases on 238,000 acres. In addition, the company has filed an application to acquire leases on 28,000 acres in northern British Columbia.

There are a number of reasons for Imperial’s involvement in coal, according to Don West, coal planner in the company’s department of new energy resources. “We’re an energy company,” he says, “and we see coal demand growing. Also, the management of resource industries has some similarities. For instance, Imperial has skills in constructing and managing large projects, forecasting energy demand, and locating reserves. These are the same in the coal business. Even though the actual technologies may differ, the business process is the same for running coal or oil companies. And, of course, we think we can make a good return on our coal exploration and development operations.”

Beyond this, coal could be important in the production of heavy oil.
The costs of mining coal are enormous. A dragnile that removes the coal in strip mining sells for more than $20 million. Operating expenses for an average-size thermal coal mine are about $10 million yearly.

Canada doesn’t produce as much coal as it consumes. In 1975, total exports of coal were slightly less than 13 million tons, valued at more than $475 million. But last year also, Canada imported more than 17 million tons, worth $515 million. All of it came from the United States. Ontario’s three major steel mills alone import more than seven million tons annually, about half of which comes from U.S. mines that the Canadian mills own.

The largest single consumer of American coal is Ontario Hydro, which, in 1975, used 6.5 million tons. The utility estimates its consumption of coal will rise sharply until, by 1980, it will be burning 19.7 million tons.

According to Vice-President Millan Nastich, in a Vancouver speech last year: “Ontario Hydro is seeking to diversify its sources of coal supply by obtaining a portion of its project needs from western Canada, while continuing and somewhat expanding the supply from the United States.”

Ontario Hydro recently made arrangements to obtain 2.5 million tons yearly from Alberta producers. First deliveries will begin in 1978, when a rail-to-ship loading centre at Thunder Bay, Ont., is scheduled to be finished. Sending the coal around the Great Lakes by rail would be too expensive. "Coal costs a lot to transport," Don West says. "And sometimes its advantage of cheapness is lost because of long hauls. Also, the cost of mining coal has risen because of inflation and environmental regulations." Right now, the price of Alberta thermal coal varies between $5 and $20 per ton (changed to an oil equivalent that's between $2 and $7 per barrel). The price depends upon the different grades of coal.

One of coal’s biggest problems used to be the damage to the land from strip mining. Referring to the removal of thermal coal, An Energy Policy for Canada says, "Good management can essentially eliminate lasting environmental problems due to strip mining on the gently dipping coal seams on the prairies." Manalta Coal, a Canadian company, with mines near Wasabamum, Alta., produces two million tons of coal annually for Calgary Power. About two-thirds of the 1,300 acres it has mined have been graded and plant life restored. The program began in 1963 when five acres were tasted with brome, timothy, red fescue, alfalfa, asteke, and crested wheat. Alfalfa produced the best results. Later, aspen poplar trees were planted. Some of these are now 15 feet tall.

Before coal was found there, the area was spotted with beds of muskeg and had little potential for agriculture. The reclaimed land produces far better vegetation, Roger Shaneman, Manalta Coal's environmentalist, says this is because impervious layers of clay have now been broken up and the drainage improved.

Shaneman adds that many people worry about the effect surface mining will have on the environment. But much of the concern is based upon events of the past. And until the late sixties in Canada, there was a problem. "Coal was a dead industry for 20 years," he says. "There just wasn't any money to put into reclamation."

According to a spokesman in the federal department of energy, mines, and resources, returning land to its previous condition or better costs between $1,000 and $5,000 per acre, depending upon the location. The most important step in reclamation is the preserving of topsoil — the upper layers of soil that support plant life. Beneath the topsoil lies bedrock and not much will grow on it. If the bedrock is left on top, the result will be a lifeless lunar-like landscape.

In many reclaimed mine areas, vegetable gardens planted in the new terrain sometimes yield superb results. "We handle overburden," explains Shaneman, "so that the material suitable for growing things ends up near the ground surface. In most mining areas, this means four to eight inches of topsoil is put back on top. Things grow very well on this reclaimed land because the entire root zone of vegetation is in a suitable growth medium."

Since 1936, when Edward L. of England proclaimed the death penalty for anyone caught using it, there has been concern for coal's ability to burn cleanly. In fact, that was one reason why so many users switched to natural gas and oil. But Imperial's Don West feels this shouldn't be a problem when it becomes a more popular fuel again. He says only large users of energy will burn coal, since they'll be the only ones with the proper facilities to ensure it burns cleanly enough to satisfy environmental regulations. This longtime problem of coal may even turn into a benefit. The British Columbia Research Council recently examined the possibility of using coal ash to extract sodium. The ash contains 27 to 33 percent alumina, a key ingredient of aluminum, which is usually extracted from land. But world prices for bauxite are going up, and Canada has none of its own. A study by the research council claims that a 2,000-megawatt power station at Hat Creek, B.C., could retain sufficient ash to help produce more than 445,000 tons of alumina annually. That would make about 220,000 tons of aluminum. Last year, Canadians consumed about 315,000 tons of aluminum. Hat Creek coal hasn't been widely developed in the past because of its high ash content.

In many ways, Canada's future in coal is alive with opportunity. That's why some oil and transportation companies are getting into the coal business. Efficiently managed and carefully developed, coal can benefit the Canadian economy and provide an extra measure of security for future energy needs.
In Montreal, there are people who never say defeat.

Shortly after noon on Oct. 27, 1975, Corporal Gilles Landry was helping a friend install a television aerial on a metal-roofed shed in a trailer park in St. Amable, Que. Suddenly the wind carried the 25-foot aerial to within a few inches of an overhead power line. The log in the air that day was enough to conduct the electricity. For about 30 seconds, Gilles Landry was held rigid by 250,000 volts — until the breaker at the hydro plant blew. Then he collapsed and was taken to Charles Le Moyne Hospital in nearby Greenfield Park, where a doctor confirmed what Landry had already decided for himself: that his feet and hands were so badly charred, they would have to be amputated.

The actual surgery was carried out at the Queen Mary Veterans Hospital and, on Feb. 18, 1974, with his amputation wounds healed, he was wheeled into the pink-walled reception area of the Rehabilitation Institute of Montreal — to learn to begin again the life he almost lost.

Gilles Landry was 30 then and had been supporting his wife, Daniele, and two children, five-year-old Dominique and six-year-old Caroline as a Canadian Forces communications technician. As soon as he entered the institute, staff members set to work helping him avoid brooding over his disability. "What we are interested in," says Dr. Gustave Gingras, the 58-year-old director general of the institute, "is not what the patient has lost — but.
what remains. We develop what is left. Our one aim is to get the patient working again."

This philosophy has characterized the institute since its inception more than 25 years ago. And it gave Gilles Landry the inspiration to help himself, maintaining his and his family's morale, learning to use artificial limbs and reexaming his capabilities so that he could realign them into a new career.

At the Rehabilitation Institute of Montreal, which sits on Darlington Avenue on the northwestern slope of Mount Royal, he received them all. The institute, specially designed for the disabled, with ramps, handrails, low light switches, and nonslip floors, has 105 beds. Its medical staff of 250 is governed by a 15-person board of directors, which includes Gingras and the Hon. Lionel Chevrier, the former federal justice minister and diplomat. Last year, it treated 2,798 patients, most of whom had been partially or totally incapacitated by injuries or diseases such as polio and cerebral palsy. Many were elderly people immobilized after strokes, some were genetically deformed children. All could have found help in other similar institutions across the country, like Winnipeg's Manitoba Rehabilitation Hospital, Toronto's Sunnybrook Hospital and Lyndhurst Hospital, or the Nova Scotia Rehabilitation Centre. But, because they were mostly residents of Quebec, they sought treatment at the Montreal Re-

habilitation Centre which, largely through the work of Gingras, has won a worldwide reputation.

In 1965, Gingras directed a Red Cross mission to Morocco, which saw the recovery of 8,000 of 10,000 people paralyzed after eating food prepared with contaminated cooking oil. In 1968, he led his staff in the rehabilitation of children stricken by the drug thalidomide. Between 1968 and 1975, with 14 staff members, he established a rehabilitation centre in Qui Nhon, South Vietnam, for war victims. And in December, 1974, he helped train personnel for a centre, founded by Cardinal Paul Emile Leger in Cameroons, West Africa, where thousands of children are treated for polio.

The institute itself has trained students in rehabilitation medicine from 32 countries, including France, Belgium, Turkey, Israel, Egypt, Morocco, and India. And staff members — physiotherapists, occupational therapists, nurses, and prosthetics experts — have traveled widely, teaching in Asia, South America, Europe, and Africa. Between 1967 and 1974, five Canadian universities conferred honorary doctorates upon Dr. Gingras.

In 1972, he was made a Companion of the Order of Canada and received the Royal Bank of Canada Award for "continued welfare to Canadians."

When Rita Johnson, the institute's campaign director, launches her annual drive for money — as she has since 1972 — the public gives generously. Last year, the target was $875,000, and Quebeers raised more than ever before — $900,000. The institute's operating costs are covered by the province of Quebec, so that money raised by contributions goes into the patients' recreation and transportation, as well as research for new orthopedic equipment. And it helps Gingras uphold a promise he made in 1962 when the institute opened, that no patient in need would ever be denied a prosthesis.

(Since 1975, the costs of prostheses, along with wheelchairs and braces, have been met by Quebec Medicare.

But the costs of hearing aids and cosmetic appliances are still not covered.) In 1968, the institute won first prize at the Fifth International Congress of Physical Medicine, in Montreal. Employees at the institute had invented an electric chair for quadriplegics. The chair is controlled by simple head movements and was designed for a young man of 19, completely paralyzed from an injury received in a football tackle. To make the invention widely available, the institute sold the rights to a Toronto wheelchair manufacturer for the symbiotic amount of $1. Also developed was a myoelectric hand (an artificial limb controlled by electrical impulses from the patient's muscles), strong enough to crush a tin can, yet able to manipulate sweaters and turn on an electric light bulb.

The institute's work "to transform the crippled and the dispirited into
useful, well-adjusted members of society" began with Gingras' almost accidental entry into rehabilitation medicine. He studied medicine at the University of Montreal, graduating in 1943 and entered the Canadian Army Medical Corps working in neurology. When he left the army in 1945, he took the advice of his mentor and close friend, Dr. Wilder Penfield, who suggested that he continue in neurosurgery. Then he added: "Why don't you spend a few months at a veterans' hospital? They could do with an optimist like you."

So, one sunny afternoon in 1945, in Ward B of the Ste-Anne de Bellevue Veterans Hospital — 18 miles west of Montreal — the "arty, amiable" Gingras was introduced to 50 young Canadians as their new medical officer. The men were either bedridden or confined to wheelchairs, and some were as disabled as Gilles Landry.

Suddenly, a 35-year-old man, Harry Ward of Springhill, N.S., asked Gingras carefully: "Doctor, how long am I a paraplegic?" Gingras replied: "Twenty years," and watched Harry Ward's face glow with a smile of relief. Only then, he remembers, did he realize that the rehabilitation of the handicapped was a worthy goal. He decided to make it his career. He became director in 1945 and Harry Ward. He became the first secretary-treasurer of the newly formed Quebec division of the Canadian Paraplegic Association and continues to serve today — as its executive director.

In 1948, the Montreal Rotary Club asked the ministry of veterans affairs for a physician to help them launch the Rehabilitation Society for Cripples. Dr. W.P. Warner, director general of treatment services for the ministry, agreed to release Gingras for two-and-a-half days a week, if the Rotarians could convince him that this new society was needed.

Gingras needed no convincing. He was concerned that war amputees were being given up as useless, and so he became the society's medical director. Meanwhile the Rotarians began planning a hospital aimed exclusively at rehabilitation. On April 1, 1950, the society opened an office in a former billiard hall. Dr. Gingras' staff: a social worker, a placement officer (also the society's administrator), and a paraplegic secretary, Helen Lippay, still make up the original team.

Soon came a part-time psychologist, a physiotherapist, a speech therapist and a more. The city of Montreal wanted the building for its administrative services and the Rotarians found two rooms on the third floor of a building on Craig Street. With second-hand furniture and $82.50 in the bank, they reopened for business, hiring a new administrator and giving him $5 to buy a desk and chair from a pawnbroker.

By 1955, the society had treated nearly 2,000 patients, of whom 20 percent had returned to work and a further 20 percent could no longer be considered "chronically disabled." Just as important, its bank balance had grown to $150,000. By this time, Gingras had realized that artificial limbs were beyond the pockets of many patients if they needed them so he set up a program to make them. Soon the society, now called the Rehabilitation Institute of Montreal, moved into its present building on Dalhington Avenue. But the institute weathered many financial difficulties. Gingras and a delegation had sought provincial aid from Premier Maurice Duplessis. He gave his assurance of a loan, but verbally: A few days later, he died and a new premier, Paul Sauvé, took office. Then he died before Gingras could plead his cause. Antonio Barrette served as premier, but only for a few months, and he was unable to meet Gingras' delegation. When the next premier, Jean Lesage, was contacted, there was no record of Duplessis' promise and the institute began its application all over again.

Finally, it received its grant ($50,000) from the government and the new building, which cost $3,5 million, opened its doors on Feb. 10, 1962 — in time for its first major assignment.

That year, about 150 thalidomide babies were born in Canada. The Manitoba Rehabilitation Hospital took them from the west, the Ontario Society for Crippled Children from central Canada, the institute accepted more than 30 from the east, though two were flown in from as far away as Germany and Peru. Some babies were born without either arms or legs. In many cases, special prostheses had to be made, particularly where there were no stumps. Staff members worked with many parents helping them to deal with their children's disabilities in a constructive way.

Now, in adolescence, the thalidomide children are still attending centres like the Rehabilitation Institute of Montreal. As they grow, their artificial limbs must either be replaced or adjusted, and this important chapter in rehabilitation medicine is still being written.

Meanwhile, the institute has counted successes:

- John W., 37, severely spastic in his lower limbs, was able to walk for the first time in three years because the institute's research department found a drug that relieved the spasms in his leg muscles.
- Physiotherapists and occupational therapists worked diligently with Carl G., so he could learn to use his left arm again following an accident in which a chain saw severed his limbs.
- Truck driver Leo P. lost two arms in a car crash — and wrote himself off as useless. But the institute fitted him with artificial limbs and taught him to shave, tie his shoelaces, and operate simple woodcraft tools.

Leo went back to work as a clerk in a shipping office.

- Claire S. was born without a left arm and with one finger protruding from where the other arm ended at the elbow. Therapists at the institute taught her to insert simple cloths like drawing and eating — with her feet.

Later, they fitted her with prostheses and Claire is now studying law at Montreal's McGill University.

- Josie L., born without a right hand and foot, was fitted with an artificial hand, enabling her to write and dress herself. With an artificial foot made especially for her, she soon learned to skip and run. Now, 12 she swims, walks well in gymnastics, rides a bicycle, and is doing well in school.

When campaign director Rita Johnson seeks funds, children are among the first to respond. Eight-year-old Alison Seely of Montreal, once a patient herself when she caught her hand in an excitable stare, "Please accept the enclosed $8 to help crippled children. I saved $5 myself and the other $3 I earned with my sister and three friends by giving an Easter party." Other contributions come from relatives of patients treated at the institute.

The Rev. Guy Pratt, priest of the church of Notre Dame de Fatima in nearby Langueau, whose mother was a stroke patient at the institute, came one day with a briefcase full of dimes, 900 collected from his parishioners. Now, with money earned from bridge parties, Father Pratt's mother herself returns to the institute, grateful for how it helped rehabilitate her.

But Gilles Landry ranks as one of the greatest successes of all. The institute, he says, drew out his inner strength to cope with his experience and helped him recognize that life is still worth living. Thus, on June 7, 1956, only seven months and a few days after his accident, he dressed, packed his suitcase, and prepared to go home to his family. He'd be back, he knew, as an outpatien for physiotherapy and to have his prostheses adjusted. Nonetheless, he walked into Gingras' office, sat down and lit a cigarette with myoelectric hands.

"Boy, he said finally, "Thanks a lot. The institute was wonderful to me."

Gingras remembers the occasion well and smiles. There is, he says, no miracle in Gilles Landry's rehabilitation. Success is achieved through the determination of the patient and the advancement of techniques such as those of the Reha-

bilitation Institute of Montreal.
In closing

There was a time, not long ago, when men and women who spent time in volunteer work were viewed with skepticism by some of the more critical people around them. They were characterized, often in caustic terms, as social climbers, patronizing in spirit, who went about doing good to those they regarded as beneath them.

Naturally this description was justified sometimes. Sinclair Lewis in his essays and novels has revealed the poseur who has lurked occasionally within the philanthropist. But as a general portrayal of the volunteer in society, this representation is inaccurate and unfair. Over the years, in every community, there have been citizens who spent time, skill, and energy in thousands of volunteer jobs, doing so out of healthy motives and with worth-while results. "If you look closely," says anthropoligist Margaret Mead, "you will see that almost anything that really matters to us, anything that embodies our deepest commitment to the way human life should be lived and cared for, depends on some form — more often, many forms — of volunteerism."

In Canada, more people than ever are engaged in some form of voluntary work. A study done in 1975 by Novie Carter of Ottawa, called Volunteers: The Untapped Potential, estimates that slightly more than half of the country's 25 million people are giving time to projects that are entirely voluntary. For some, it may be as simple as donating blood, but for most, according to the Carter study, it is for a program that requires an ongoing contribution of time and skill.

As the number of volunteers in society increases, so does their variety. Until recent years, the typical volunteer was female and middle-aged. Now almost half of the volunteers in Canada are men, engaged not just in the traditional and useful role of coaching hockey teams, but in new expressions of volunteerism, in distress centres, citizen organizations, or language classes. "Many men," says Jean Shek of the Volunteer Centre of Metropolitan Toronto, "are retiring earlier and, having been busy all their adult lives in the working world, want to keep busy, so they volunteer." In addition, more women are serving on the boards of agencies in administrative roles.

Along with the increasing number of experienced people, there are more young adults, so that almost 16 percent of the volunteers in Canada are under 25. "A growing number of our volunteers are young working adults," says Bruce Hill of the Volunteer Bureau of Calgary, "many of them working in fields that are quite technical and so they are seeking something they don't get on the job, a chance to work more closely on human issues."

Hill's comment underlines an important new recognition among today's volunteers: they are motivated, not just by a desire for service, but by a need for satisfaction. Indeed, this attitude may not be new at all, simply more openly acknowledged. "Many of the new volunteers," says Jean Shek of Toronto, "are quite frank in saying that they want to meet people or that they find life lonely in a large city. They put their feelings on the table quite honestly. And as long as they aren't volunteering only for their own needs, it's a healthy attitude."

As the country changes toward larger cities and ethnic diversity, the styles of volunteer work are changing with it. There are already new expressions of volunteerism in the downtown areas of Canada — legal-aid clinics, information centres, counselling services — that have developed to meet the new needs of a changing society. As these programs develop, it is important that the volunteers who serve them are drawn from the communities themselves, with representation from native Canadians, new Canadians, and people of low income.

The need for volunteers is becoming increasingly obvious. As the demand for services grows and costs rise, governments are finding that they cannot meet every need in social programs. So they are encouraging volunteers. For example, in Ontario over the past year, there were 2,700 people serving in the field of corrections, as part-time probation officers and visitors in jails and reformatories. "Next year," says Bob Fox, who coordinates the volunteer programs, "we expect the number will grow to 4,000."

In correctional work, the values are received not just by the inmate and the volunteer, but by the system itself. "It is one way of increasing public understanding," says Fox, "by involving the public in the work. And volunteers bring in all kinds of expertise and opportunities to inmates, from learning to handle their finances better to conducting themselves in job interviews." Last summer, Ontario's department of corrections held a conference in Toronto on volunteer work and 700 people from across Canada attended.

To make people more aware of such opportunities, more than 60 Canadian towns and cities have volunteer bureaus listed in the telephone directory, and are ready to advise callers of where they can serve in their own communities. "We're contacted by about 400 people a year," says Marian Rickard of the volunteer bureau in Saint John, N.B., "and we have opportunities for all of them."

It may be that the ultimate value of the volunteer in the modern world is not just to individuals or to himself, but to the whole of society which, as some psychologists claim, has a current tendency to turn away from the needs of others. "Today," says American psychoanalyst Herbert Hendin, "the culture has made caring seem like losing."

That may or may not be the case. But what is certain is that, at their best, people care about others. As we move into a complicated future, we can try to ensure that our communities provide a chance for all of us to help create a more humane society.