

# Counting the cost of acid rain

When the fish die off the tourists go elsewhere. That's only part of the price we pay for our do-nothing policy

BY ROSS HOWARD AND MICHAEL PERLEY

**T**o date almost the only discussion of acid rain in economic terms has focused on the cost of turning it off. In surprisingly short order, governments and industry have been able to project frightening multibillion-dollar expenditures needed if acid rain sources are to be curbed in North America. One recent prediction runs close to \$5 billion over a decade for Canada alone.

There's much to suggest that such sums are exaggerated, based as they are on traditional technology and corporate analyses, but much more important, these costs are grossly deceptive. They loom as large as they do—casting shadows of galloping inflation, corporate bankruptcy, job loss and skyrocketing consumer prices—because they stand alone. The other cost of acid rain—economic damage—has been left unconsidered.

The task of calculating acid rain damage is admittedly far more intricate than the abatement estimates, and governments and decision-makers have so far chosen to ignore the question because they don't know its exact dimensions. But there is already some evidence that the cost of acid rain is so enormous that it could undermine the financial stability of entire regional and national economies. And while the detailed damage reports are still unavailable, there is much to gain by recognizing the enormity of what is at stake.

Fishing-lodge operators in northern Ontario are none too optimistic these days. At more than three-quarters of the 1,600 lodges and road's end resorts across the north, the owners say that prospects for the next five years are even chancier than usual. Having poured more than \$65 million of their own money into buildings,

cabins and boats since 1972, they have developed a canny sense about their industry and its resources. As they told provincial northern affairs ministry researchers in a 1978 study, their costs were being driven up and their resources, such as the yellow pickerel, northern pike and brook, rainbow and lake trout that attracted the Americans (who make up 65% of the clientele) were declining. Nearly 85% of those Americans who traveled, on average, 700 mi. to the north and spent \$675 per visit came for only one reason: the fishing. And as the government researchers later reported, those Americans, and Canadians, generated more than \$120 million in annual direct and indirect revenue, creating more than 10% of the 200,000 northern jobs available.

As the government report also noted, the further east across the wilderness of Ontario the researchers moved, the more and more discouraged they found the fishing-lodge operators. In the Sudbury, Timiskaming and Nipissing regions of northeastern Ontario, which support nearly half the northern lodges, one-half to one-third of the operators were bluntly pessimistic about their future prosperity. The report did not mention that the northeast was the area most heavily rained upon by acid, and preferred to attribute fish decline to cyclical populations, over-fishing and unspecified urban and industrial pollution. The report offered numerous recommendations for more studies. It suggested increased fish restocking, as well as a public-relations campaign to remind us all that our aquatic resources are under stress. It also included the ominous warning that "fishermen are going to have to accept declines in quality standards."

But as one fishing-lodge operator discovered in 1979, much more than just quality was at stake. Jerry Liddle, a young operator whose family runs three lodges in the northern Wawa area, approached the Ontario Ministry of the Environment in 1978 for funds to conduct a major study of acid rain and its implications for his industry. As Liddle correctly suspected, nothing like this had been considered in any detail by the provincial government (and certainly not by the northern affairs ministry study).

However, Liddle received only a few thousand dollars, and not from any of the policy-making, long-range research divisions of the environment ministry but from the already alarmed and overburdened fishery and water quality team. The money barely covered Liddle's costs of duplication and postage for a simple questionnaire, but it was enough for him to come to some rough conclusions by late 1979. His fishing-lodge colleagues knew little or nothing about acid rain—but they knew their fishery was declining. As he summarized, "The trend is toward smaller and smaller fish, a lack of large or spawning fish, and increasing difficulty in catching fish." His summary bore remarkable similarity to the conclusions University of Toronto researcher Harold Harvey reached

*Excerpted from Acid Rain: the North American Forecast by Ross Howard and Michael Perley. Copyright© 1980 by Ross Howard and Michael Perley. Published by House of Anansi Press Ltd. this month at \$16.95. Howard is environment editor at the Toronto Star and Perley is executive director of the Canadian Environmental Law Research Foundation.*

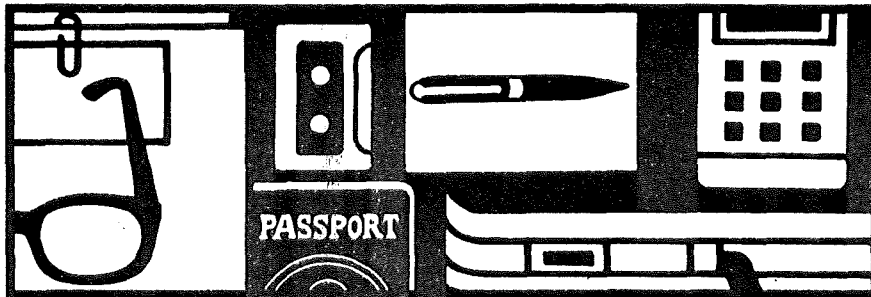
OLGA TRACEY

**SAULT STE. MARIE, ONTARIO, CANADA**

**FREEDOM COUNTRY.**

Sault Ste. Marie, Ontario, Canada. Low cost, abundant energy. A skilled labor force in a community of 81,000. Located within 500 miles of the major industrial centers of Michigan, Illinois, Wisconsin, Minnesota, Indiana and Ohio. Well served by lake or ocean shipping, rail, Interstate and Trans-Canada highways, and by American and Canadian airlines. An ideal, central Canadian location for your next expansion. Freedom to make a profit with lots of elbow room. Freedom to grow with us.

For information write to:  
Economic Development  
Commissioner  
Box 580, Civic Centre,  
Sault Ste. Marie,  
Ontario, Canada.  
P6A 5Y1  
(705) 949-9111  
Ext. 119



## Japanese and Chinese — JAL has them taped.

Going to Japan or China on business or to see the sights? Worried, maybe, about the language problem?

Japan Air Lines has it taped. On cassettes. Your personal Jet Age Language Courses, available in both Japanese and Chinese (Mandarin dialect), complete with step-by-step printed lessons to go along with the tape, so you can practise your pronunciation.

We don't claim you will be totally fluent in either Oriental language, but these tapes can help with common expressions which the average businessman or tourist finds useful.

Japan Air Lines has other travel aids as well — like our best-selling JAL Guide to the People's Republic of China; or our

Businessman's Guide to China; and JAL's After-Hours Guide to Japan.

How much? The language packs are \$13 each, the After-Hours Japan Guide is \$3, other books \$5 — all in Canadian funds, post-free and available from Japan Air Lines' main reservations centres —

777 Hornby Street  
Vancouver, B.C. V6Z 1S4  
Tel: 688-6611

111 Richmond St. West  
Toronto, Ont. M5H 2G4  
Tel: 364-7226



**JAPAN AIR LINES**

### Acid rain continued

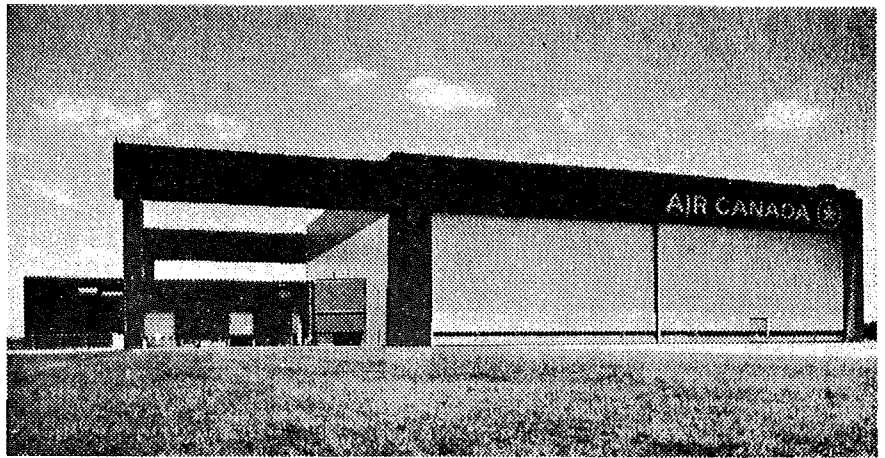
exactly a decade earlier concerning the Killarney lakes of near-northern Ontario, lakes that had been killed by acid rain.

"The quality of the resource base has been going downhill, especially in the last 10 years," Liddle added. "How long can the fishery stand this pressure and how long will the industry be able to survive?" Drawing from environment ministry data on the beleaguered lakes of northeastern Ontario, Liddle came up with an answer: almost 600 fishing lodges could go belly up within 20 years if the acid rainfall continued, killing about 6,000 jobs and \$28 million of annual income in the area. The environment ministry received his report with little comment, but Liddle had uncovered the tip of an iceberg. The fishing lodges he studied serve only 12% of the more than 16 million fishing "occasions" that take place in an average year. According to government statistics, almost one out of every two Ontario male residents and one out of three females go fishing, spending an average of \$154 a year on their hooks, rods, bait, hipwaders and so forth. Combined with the Americans who come north, these fishermen spent an incredible \$450 million in 1975, a typical year. The average Ontario fisherman travels less than 350 mi., which means using the already over-fished near-northern areas of Muskoka-Parry Sound, Haliburton and Sudbury-North Bay. As both the Jerry Liddle and provincial studies show, there are already five people fishing for every available fish in the northeast. And this is where acid rain is falling most heavily, on the 140 lakes already known to be acid-dead and on the estimated 48,000 more lakes similarly jeopardized.

To mid-1980 there were no Ontario government studies on the financial impact of dead lakes. In fact, it wasn't until early 1980 that the first such study was commissioned, and it could take two years or more to complete. Fortunately, to the south in the six-million-acre Adirondack state park in New York, where equally intense acid rain is monitored, there are indications of what Ontario may find. The park lies only a full day's drive away from more than 55 million Americans, and each year, until recently, at least 1.7 million fishing

trips were registered in the park, generating an estimated \$16 million in the local economy. But in 1976, after the confirmation of more than 100 acid-dead lakes, state park researchers estimated that nearly \$1.5 million in fishing expenditures had been lost. As parks commissioner Anna La Bastille told a Toronto conference on acid rain in late 1979, fishermen don't spend money to dabble in dead lakes. A more detailed study in 1978 based just on the dead lakes—the total had risen to 170—showed a direct annual loss of \$370,000. Applied to all 3,000 lakes in the park, the economic loss was estimated at "probably much higher than \$1.7 million a year," the commissioner reported. "We've turned that park into a national acid cesspool, and now we in the area are paying for it," she added.

But the Adirondack figures are only a foretaste of what Ontario soon could be paying for the acid in its 48,000 threatened lakes. The once-clean water resources of the near north attract millions of visits, from residents and tourists alike, for the fishing, recreation and cottaging. In Ontario as a whole, tourism is the second-largest industry in the province, directly accounting for \$5 billion in annual revenue and 470,000 jobs—nearly 6% of the total gross provincial product and 11% of all the jobs. The southern cities draw the largest amount, but nearly \$900 million is spent just in the area from the Bruce Peninsula to the Muskoka-Haliburton boundary and all of the northeast. Much of that area is the most acid-vulnerable too. It's the cottage heartland of Ontario, containing almost two-thirds of 250,000 such getaway retreats, which foster 50 million person-days of relaxation each year (the equivalent of 7 million people each spending one week "at the cottage"). Those cottagers directly spend \$200 million a year in the area. In an optimistic tourist-promotion study in 1977, the provincial tourism ministry noted that Ontario "possesses impressive water resources, difficult to match anywhere in the world" as tourist attractions, and ranked the 17 most important tourism areas of the province. The fourth most important area was the Barrie-Parry Sound-Huntsville triangle. Ninety per cent of the visitors in that playground come from Ontario itself



EASTERN  
BUILT IT

The Air Canada maintenance hangar in Winnipeg services jumbo jets and the dimensions are jumbo too—320 feet long by 300 feet wide and 101 feet high. The clear span trusses are 20 feet deep and span 280 feet. The Number Ten

Architectural Group designed it and Eastern Built It.

**EASTERN CONSTRUCTION**  
TORONTO-WINDSOR

One of the  
Odette Group of Companies



## The JALsaver fare to Tokyo: \$853\*

Japan Air Lines has a great deal going for you this winter — the JALsaver fare (Advance Purchase Excursion Fares — APEX): \$853 in Canadian funds from Vancouver to Tokyo and return (government departure taxes extra).

The rules for our JALsaver fare are simple: reserve and pay for your ticket at least 30 days prior to your departure date, and plan on a stay in Japan of between 14 and 60 days. That's it! (There's a 15% penalty if you cancel your flights, however.) There's a half fare for the youngsters under the age of 12, too. (If you travel between June 1 and

October 31, 1981, the fare is \$930.)

Seats available at this fare are limited, so see your travel agent soon for all the details — or call Japan Air Lines reservations centres direct in Vancouver: 688-6611 or Toronto: 364-7226 for more details. Toll-free from most out-of-town cities.



**JAPAN AIR LINES**

Vancouver-Tokyo flights in co-operation with CPAir.  
\*November 1, 1980-May 31, 1981, and subject to change without notice.

and, with outsiders, spend \$96 million per year for a holiday. But what the tourism report failed to note is that the Parry Sound-Huntsville area is dead centre in Ontario's acid rain zone, where acid rain falls at levels difficult to match anywhere else in the world.

It's not easy to quantify what a lake with no fish means to a person with a \$40,000 investment in his cottage. But for 70 years city dwellers have been spending massive amounts of money for the privilege of owning a piece of nature by an unspoiled lake. The Ontario government uses woodland green for its official lettering—fitting for a province that fosters more wilderness summer camps than any other province or state in North America. The most popular tourist activities of Ontario residents are cottaging, boating, fishing and camping. The premier of the province may tour the world in praise of Ontario's manufacturing capacity, but it is to an island in Georgian Bay (where acid-stressed fish populations are declining) that he too retreats.

The full value of this near-northern wilderness exceeds dollar statistics. Consider Gord Mewhiney, spokesman for the Federation of Ontario Cottagers Associations, in his summation to the legislative committee on resource development in 1979: "What is happening in front of our cottages? We were once told of water pollution, then we were told not to eat the fish because of mercury and now we are told that our lakes simply don't have a hope in hell. Our northern area, our lifestyle, it's all jeopardized. Put a plug on acid rain, now, before it is too late." But Mewhiney also spoke of the lakes in terms that could not fail to move even the most detached urban politician. "We are 300,000 cottage owners, a million voters, and our property values and future for retirement are at stake here. We have a large economic impact—if we are forced to give up and go south for our relaxation, the cottage area business won't exist within three decades."

Treasurer of Ontario Frank Miller may offer multimillion-dollar enticements to automobile manufacturers to build factories in the south, but he is also the first to face delegations of worried resort owners from Muskoka. After all, he got his start operating a

Muskoka resort (and still does). Muskoka is his constituency. He knows the value of the industry. And his counterpart ministers at the provincial industry and tourism department know it; they've lent more than \$56 million to the industry since 1966 to build it up. By 1979 tourism loans, particularly for resort rejuvenation, were taking up 20% of all annual business development loans. The Ministry of Industry and Tourism boasts that its good works are "synonymous with economic growth" in Ontario, and projects that by the year 2000 "tourism will be Canada's leading contributor in income, employment and export earnings." Under existing policies, acid rain will continue to fall unabated until the year 2001.

---

## **Canada's forest industry is worth \$18.5 billion in exports alone. It will soon be endangered if the trees stop growing because of acid rain**

---

Ontario's environment minister, Harry Parrott, once tossed off an unexplained estimate of \$500 million a year as a possible acid rain damage cost, when he spoke before the legislative committee. But the economic effects of acid rain on tourism could, almost like the physical effects of acid rain, begin unnoticed and be attributed to something else. Ontario tourism operators objected to newspaper reports about acid rain in the late spring of 1978, calling it the worst possible publicity for the beginning of the tourist season. Who can blame them? And yet, future seasons may never happen if the conspiracy of silence continues. Dr. David Schlinder of the federal Freshwater Institute feared the worst when he told the committee in early 1979: "There's been much talk of the jobs lost if major polluters are forced to curb their emissions. But I hope somebody is thinking of the thousands of tourist operators who will be

out of business in 10 to 15 years if there are no controls on emissions." To 1980, no one in the Ontario government has given that possibility much thought, at least not in any recognizable form of studies, projections or public warnings. And yet the same government concedes that without an early end to acid rain, the death of the lakes that support the industry is more than a possibility. It is virtually inevitable.

Ontario's aquatic resource base for fishing and tourism is not the only one at stake. Québec, the Adirondacks, Minnesota and Michigan all draw substantial revenue from the lakes and rivers. And in Nova Scotia, where it rains acid too, much of the famed Atlantic salmon fishery has already gone down the drain. Federal fisheries biologist Walton Watt explained the situation in an interview in 1979. With acid levels averaging below pH 4.8 in 1978, the waters of seven major rivers running south-east across Nova Scotia to the ocean had become death traps for the salmon. Twenty years ago rivers like the Mersey, Roseway and Sissiboo provided record catches of the big fish. "Now they're dead. There are no salmon. They're wiped out." He estimated 6,000-7,000 salmon had disappeared, and another 20,000 in other rivers were heading for extinction.

As Watt pointed out, a sport fisherman spends roughly \$150 on equipment, travel and lodging when fishing the southeastern rivers. The area had been famous and drew fishermen from far beyond the local region. But now, with more than 6,000 fewer fish, Watt calculated that a minimum of \$600,000 was being lost as income in the area, year after year. He admitted his calculations were rough, but for him they had particular meaning. "I know the sport fishing industry has drastically declined. My family used to be part of it." There's no profit now for southeastern Nova Scotia in sport fishing rivers, which today hold nothing but plentiful supplies of eels.

Nearly 5,000 miles to the north-east, across the Atlantic in Sweden, there are details on exactly what is at stake in waters washed with acid. It's the kind of information that has made Sweden a world leader in acid-rain research and made the economic realities of acid rain understandable to every Swede. This in turn has fostered political decisions that have

## Acid rain continued

already produced reductions in Sweden's pollution emissions. A 1978 government study, for example, calculated that Sweden faces a \$16.5-million annual loss in inland commercial fisheries owing to acidified waters. Sport fishing and tourism losses total another \$50 million annually. Coastal fishing for species that spawn in fresh water (like Atlantic salmon) wasn't calculated in that report, beyond a note that 85% of the migration to the sea would be affected. The report was based on the assumption that the productivity of fish "sooner or later in principle will be zero if the deposition of acid continues at the present rate." And, as the report dispassionately concluded, in the most heavily acidified regions "the disappearance of incomes from fishing and tourism can jeopardize the possibilities for the people to exist and make a living in these areas."

At a UN conference in Stockholm in 1971, the Swedes also considered the damages to forests, property and human health, in dollar terms. As the authors of the conference summary

readily admitted, absolute proof was not then available, but on the basis of a decade's research, the Swedish government felt justified in coming to some shocking conclusions. In forest growth, "an annual rate of reduction amounting to 0.3 per cent would probably be of the right order of magnitude," the summary stated. And based on the unfortunate likelihood that acid-rain source emissions, particularly from Europe, would remain the same as had been measured in 1965—a condition the Swedes admitted "is thought to be the most realistic"—by the year 2000 Sweden will suffer a 13% decline in forest growth. "A direct estimate in monetary terms (of such a condition) hardly does justice to the nature of the damage," the report added, but "the most informative figures are probably that 7% of the raw material base of the country's forest and pulp industry will have disappeared by the year 2000." And that would equal a minimum cost (loss) of \$40 million a year, by the year 2000.

The Hubbard Brook Forest, NH, investigation revealed a 20% drop in wood production after 1961. In October 1979, the first Canada-US assess-

ment of acid rain warned that forest degradation could have reached an irreversible state long before a 20% loss in wood productivity was absolutely proven. And there are other studies. Consider what is at stake in Canada alone. Trees cover 35% of the land. Directly or indirectly they provide one out of every 10 jobs in the country, \$18.5 billion worth of shipped material and \$9 billion in added value in 1978, a \$10.6-billion net contribution to Canada's balance of payments in 1979. Canada is the world's leader in newsprint production and export (half the world's total); second in pulp production (Sweden is fourth); and harvests nearly 5 billion cu. ft. of wood per year. That's only part of the story. After a century of uncontrolled decimation, the Canadian forest industry is now running out of trees. As much as one-eighth of Canada's prime forest land is not adequately stocked with harvestable trees now, and 500,000 acres more are added to the backlog each year.

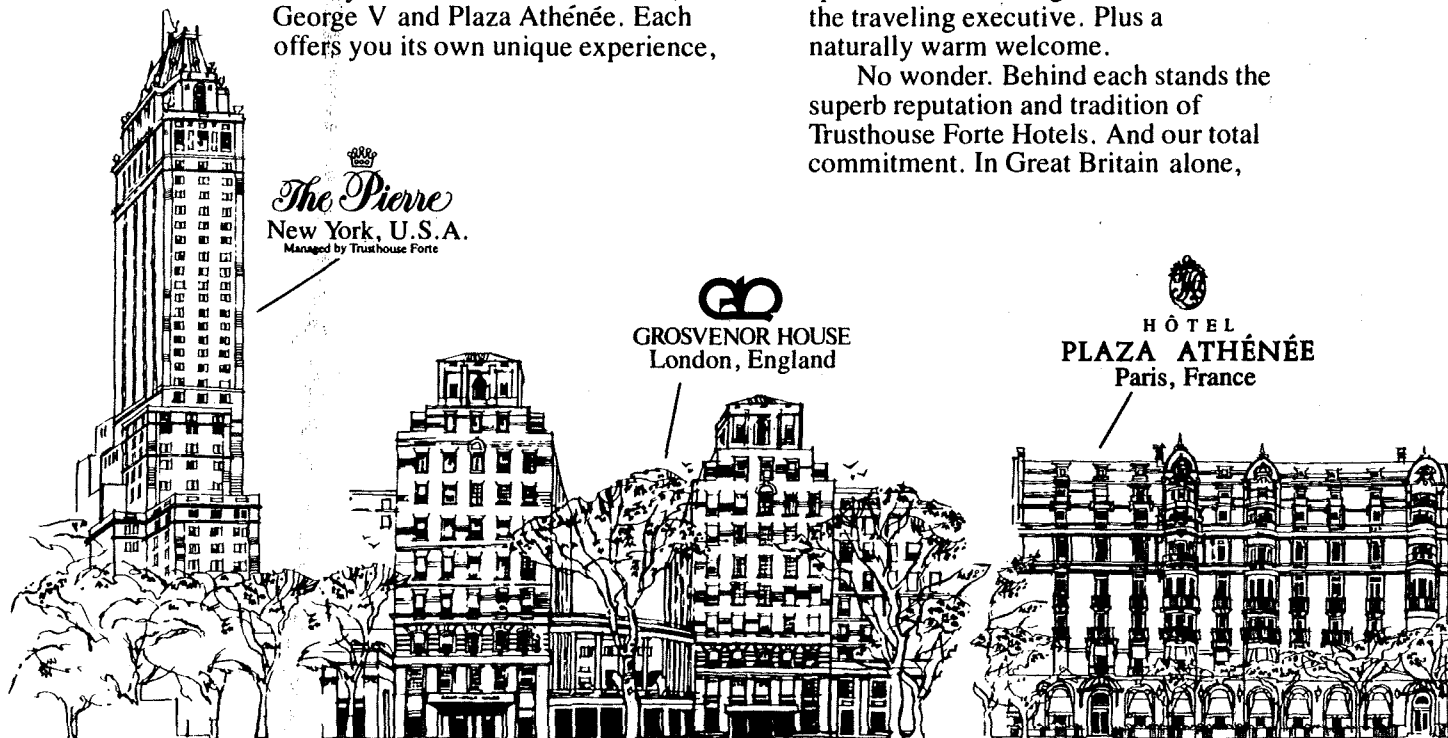
The worst of this forest shortfall exists in eastern Canada—in Ontario, Québec and the Atlantic region—which provides almost exactly half of Canada's forest productivity. The

# Behind these great hotel names,

The Grosvenor House in London. The Hyde Park. Brown's. In Paris, The George V and Plaza Athénée. Each offers you its own unique experience,

in comfort and personal service, and special understanding of the needs of the traveling executive. Plus a naturally warm welcome.

No wonder. Behind each stands the superb reputation and tradition of Trusthouse Forte Hotels. And our total commitment. In Great Britain alone,



*The Pierre*  
New York, U.S.A.  
Managed by Trusthouse Forte

  
GROSVENOR HOUSE  
London, England

  
HÔTEL  
PLAZA ATHÉNÉE  
Paris, France



industry and, more recently, the federal and provincial governments maintain they can increase the harvest from this already depleted half of the country by another 40% within 25 years, by using improved techniques.

But what nobody seems to have considered at any length, judging by the public statements, is the risk that the forests won't grow, because of acid rain. As the joint Canada-US acid-rain assessment in 1979 pointed out, "Much of the most productive forest in northeastern Canada lies within the zone most affected by long-range transport and acid deposition." The trend to taking more trees leaves the land barren and exposed to acid rain and snowfall, and to slow, irreversible poisoning of the soil. As the Canada-US report noted, acid pollution on merely a fraction of the scale of that typical around the well-known sulphur sources such as Inco's Sudbury smelter could produce "the most disastrous consequences for the well-being of a vital resource industry."

An almost entirely unnoticed study by the National Research Council of Canada in August 1977 estimated the direct annual loss to forests due to

acid rain at that time "to lie between \$1.2 million and \$2.8 million." That study was heavily criticized by provincial governments as unsubstantiated and likely erroneous. And yet, further Canadian research into the question has been negligible. The Canadian Forestry Service, which federal cabinet minister John Roberts promised in March 1980 would play "a prominent role in determining the effect of acid rain on forests," is now operating on a budget 50% smaller than it was in 1973. And Roberts, in a major policy speech to the Canadian forest industry in March 1980, did not hold out much hope for any substantially improved funding. He did, however, promise the forest industry that the service would help find better ways to harvest trees. What the service has yet to find out is whether there will be enough trees to cut, if acid rain continues unabated. (Roberts, incidentally, is also the new Canadian minister of the environment.) There is indeed much at stake, including the federal minister's credibility in professing to worry about acid rain while ignoring its implications for forestry and Canada's economy.

More than forests are at stake.

Agricultural crops are worth \$8.9 billion per year in Canada. There is strong evidence that what grows in the soil is affected by the acid rainfall. The extensive experiments by the US Environmental Protection Agency (EPA) at Corvallis, Ore., and others at Oak Ridge, Tenn., Hawaii and the experimental tobacco plots north of Toronto all show damage to crops such as radishes, beans and tobacco. By the end of 1980 the Corvallis experiments may indicate exactly how little acid rain is necessary to blight, corrode or kill a crop. Matching direct damage with sub-soil degradation may take years of research before precise answers are available. For now, the only sure conclusion is that untold millions of dollars worth of agricultural crops are at risk. And yet, to date there are no Canadian or American policies to counteract this risk. It wasn't until October 1979 that either country formally acknowledged that "there is every indication that acid rainfall is deleterious to crops."

Not all of the economic calculations of acid-rain damage need be based on too few studies and "reasonable predictions." There is one aspect

# there's a great hotel name.

we own over 200 hotels: Post Houses, city centre hotels and country inns of character and charm.

We can take care of you very well, in fact, throughout the U.K. and Europe, and at resorts and hotels worldwide. Next time you travel, get a great name behind you.

And great people: Trusthouse Forte.

Call us toll-free: 1-800-268-3211.

Or see your travel agent.

Yours faithfully

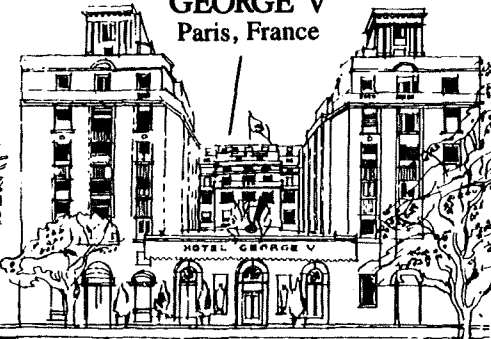
TRUSTHOUSE FORTE HOTELS

*Sandy Lane Hotel*

Barbados, West Indies

  
HOTEL  
GEORGE V  
Paris, France

  
HYDE PARK HOTEL  
London, England



JAMAICA • MALTA • MONACO • NETHERLANDS • PORTUGAL • SARDINIA • SAUDI ARABIA • SPAIN • SRI LANKA • SWITZERLAND • TUNISIA • U.A.E. • U.S.A.

**Acid rain continued**

of the damage that is clear-cut now, and enormously expensive—property damage. Long before Sweden concluded that sulphur dioxide and associated air pollutants were costing \$20 million a year in metal, stone and wood corrosion, engineers and scientists around the world had charted rates of air pollution damage. To cite only one example, Cleopatra's Needle, the stone obelisk moved from Egypt to London, has suffered more deterioration in the damp, dirty and acid atmosphere of London in 80 years than it had in the preceding 3,000 years of its history. Cement, concrete, metals, paints, even fabrics are victims—flags fade faster and are tattered sooner in cities such as Los Angeles or Chicago than in cities of cleaner air. In 1978 the US president's Council on Environmental Quality estimated that property damage due to acid rain is \$2 billion a year. In 1977 the National Research Council of Canada reported that sulphur emissions in air cause an estimated \$285 million in damage per year in building deterioration, including \$70 million in exterior paint damage alone. The distinction between direct damage by air laden with local sulphur dioxide and wind-blown sulphuric acid from distant sources is not clear yet, but the total damage due to sulphur emissions, in one form or another, is obvious. As the International Joint Commission reported in 1979, 50% of the corrosion of cars may be due to acid rain.

And finally, there are health costs. A study estimated that almost 1,000 Canadians may die each year because of acid-rain-related respiratory diseases, and the toll is at least 1,000 deaths a year in the US. The true value of life in North America is inestimable on an individual basis, on a national basis economists and health care professionals estimate that premature death causes an average \$80,000 loss in income alone. As the professionals are the first to admit, such calculations are highly insensitive to such factors as spouses who don't earn income and medical costs and lost income not directly attributed to illness leading to death. But the American EPA, in calculating time and productivity lost and hospital and compensation costs estimates that air pollution is costing the country more than \$10 billion a

year. The Council on Environmental Quality estimates that sulphur dioxide alone causes \$1.7 billion worth of health care costs each year in the US. The costs will almost inevitably be higher by the time research has pinned down exact totals.

No one knows exactly what acid rain is already costing North America, or will cost if the problem increases. Future costs, however, go well beyond the merely economic. As biologist Tom Hutchison of the University of Toronto told the Ontario legislature committee, "Deterioration

of our lake environments, of the fisheries and the recreational aspects that go with it, is going to hit a lot of people very hard. ... If we allow our short-term solutions to problems to devastate that environment, as we are on the way to doing now with acid rain, I think we are going to have to do a lot of answering to a lot of people in 15 to 20 years' time."

Unfortunately for Hutchison and that environment, 15 years' time is beyond the normal vision and term of office of those making the decisions now. **\$**

In the world's largest Scotch Whisky market, New Yorkers buy more Dewar's White Label than any other brand.

Taste will tell you why.

Dewar's  
Scotch Whisky  
White Label  
John Dewar & Sons Ltd  
PERTH