

forest decline studies. Ontario and Quebec have each spent about (U.S.) \$1.6 million on research and monitoring.

What is the solution? The only long-term solution is to reduce the levels of acid deposition. For lakes and streams, Canadian scientists have determined, after extensive research, that the critical load of acid deposition for vulnerable areas should be no more than 20 kilograms per hectare (18 pounds per acre) per year. Scientists have not yet determined precisely the critical load which would protect eastern Canada's forests from acid-rain-related damage. Most scientific evidence from Canada, the United States and Europe, however, points to a critical load for vulnerable forest areas similar to that needed to protect lakes and streams, namely 18 pounds per acre per year.

This goal is far from being achieved, as nearly half of eastern Canada's forests receive acid deposition in excess of this level. In the meantime, Canadian scientists are also investigating the extent to which fertilizing and liming can be used to alleviate acid-rain-related stresses on forests. Such palliative remedies may be useful in smaller areas like sugar bushes.

The transborder reductions in sulphur-dioxide flows which Canada has asked of the United States, in combination with Canada's Acid Rain Control Program, should achieve an acid deposition rate of no more than 18 pounds in the most heavily affected areas of eastern Canada (for example, the Muskoka-Haliburton / Quebec City corridor). Achieving this objective in the most affected areas will result in substantially lower deposition rates (perhaps as low as 9 pounds) in many other vulnerable areas. Forests on both sides of the border will benefit.

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