

Acid rain

## Canada must act alone

*Washington*

THE Canadian Government, exasperated by the Reagan Administration's decision to do no more than continue research on the acid rain problem, is considering substantial unilateral curbs on its sulphur dioxide emissions.

In 1982, Canada unilaterally decided to institute a 25 per cent reduction by 1990 in sulphur emissions. It has since been hoping to negotiate further cut-backs as part of an overall agreement with the United States in which both parties would work to reduce transboundary sulphur pollution. Although sulphur emissions from both countries cross into the other, Canada suffers most from transboundary pollution.

The Reagan Administration has consistently refused to order reductions in US sulphur emissions, arguing that scientific uncertainties must first be resolved. That position was reiterated most recently by science adviser George Keyworth in his briefing on Reagan's 1985 budget proposals, which include funds for more research on acid rain, but no regulatory action. The administration, in maintaining this position, has ignored the recommendations of both the National Academy of Sciences and a panel of scientific experts assembled by the White House Office of Science and Technology Policy. The White House group last summer found that although scientific uncertainties do exist, new regulatory action is justifiable because of the possibility of "irreversible damage" to the environment by acid deposition.

Canada's current programme involves reducing sulphur emissions 25 per cent below the levels already required to meet ambient air quality standards instituted in the mid-1970s. Canada's ambient standards are at least as strict as US standards and, like them, are designed to protect human health from acute effects of sulphur dioxide rather than to control acid rain.

Bruce Jutzi of the Canadian Embassy in Washington says that while Canada had not yet decided to institute new curbs, such action is under serious consideration. "Now that it's apparent there's nothing for the foreseeable future to be done together, that puts the onus back on the Canadian Government", he said. Jutzi said that ultimately Canada expects to have to reduce its sulphur emissions by 50 per cent from the ambient standards as its contribution to solving the transboundary pollution problem. "I'd personally be a bit surprised to see us go all the way to that limit without any movement from the United States", he said.

Canada's main source of sulphur emissions is smelters; in the United States it is coal-fired power stations.

**Stephen Budiansky**Conservation

## Farm policy hits Broads

CONSERVATIONISTS in Britain are anxiously awaiting the outcome of a local dispute that is seen as a major test of the 1981 Wildlife and Countryside Act. The question is who should pay the compensation that the act offers to landowners who agree not to turn valuable habitats into farmland. The growing incentives to produce more farmland were stressed last week at a meeting called to discuss the ecological crisis facing the locality.

The dispute concerns Halvergate Marshes, close to Great Yarmouth in eastern England, and has arisen because the Broads Authority, set up in 1978 to safeguard the whole of the Norfolk Broads of which Halvergate is a part, claims that it cannot afford the level of compensation involved. Two thousand acres of grazing marsh have been turned over to arable farming in the past 3 years and according to one estimate another five thousand acres could be ploughed within the next 5 years, unless compensatory payments of up to £200 per acre per year are found.

The problem of much of broadland is that it is very expensive to protect, having a high amenity value to tourists (whose boats are eroding the river banks) and to farmers (who drain and turn to the plough the prized grazing marshes in order to take advantage of the generous guaranteed prices laid down in Brussels). And so the area tends to throw into sharp relief conflicts of interest, and tests to the limit the legislation designed to resolve them.

The essence of the Wildlife and Countryside Act is that designated authorities wishing to protect a site from some planned action must, if persuasion is ineffective, be prepared to pay the owner for loss of projected profits. For arable farming these can be high, and the Broads Authority says it cannot afford to pay for these "management agreements". Half of the authority's income comes from the local councils of the region, while the other half is from central funds through the Countryside Commission. The authority, which com-

prises local authority representatives, has refused to continue making payments on these terms.

In areas designated as National Parks (which the Broads are not), 75 per cent of local compensation agreements are met from Government. But the Countryside Commission, itself the government's adviser, has argued strongly that 90 per cent reimbursement would be more appropriate for the Broads Authority. Representatives of the authority are soon to meet Mr William Waldegrave, Under-Secretary of State in the Department of the Environment, to thrash out a solution.

The powers of the Broads Authority have recently been the subject of a searching review by the Countryside Commission, which next month will formally recommend to government that it should be given special statutory powers to coordinate a rescue plan for the area.

The main problems facing broadland are that raised nitrate and phosphate levels cause algal blooms which shade out bottom-living plants. Consequently, banks erode more quickly, much wildlife disappears and sedimentation rates increase. Some ecologists fear that the expansion of arable farming may have wider consequences in the region.

Last week, two learned societies spent a day discussing the ecological crisis facing the Broads and heard speakers express concern that the European Community's Common Agricultural Policy and grants from the Ministry of Agriculture, Fisheries and Food will encourage the loss of much of the remaining grazing marsh in the area. At the end of the day, representatives of the British Ecological Society and the Linnean Society of London were told by their chairman that while it would be "entirely inappropriate" for them to pass a resolution expressing concern on the issue, it would be in order for a report on recent research "showing the scientific consensus" to be prepared and despatched to relevant government officials. **Tim Beardsley**



Anathema to Europe's farmers — Halvergate Marshes