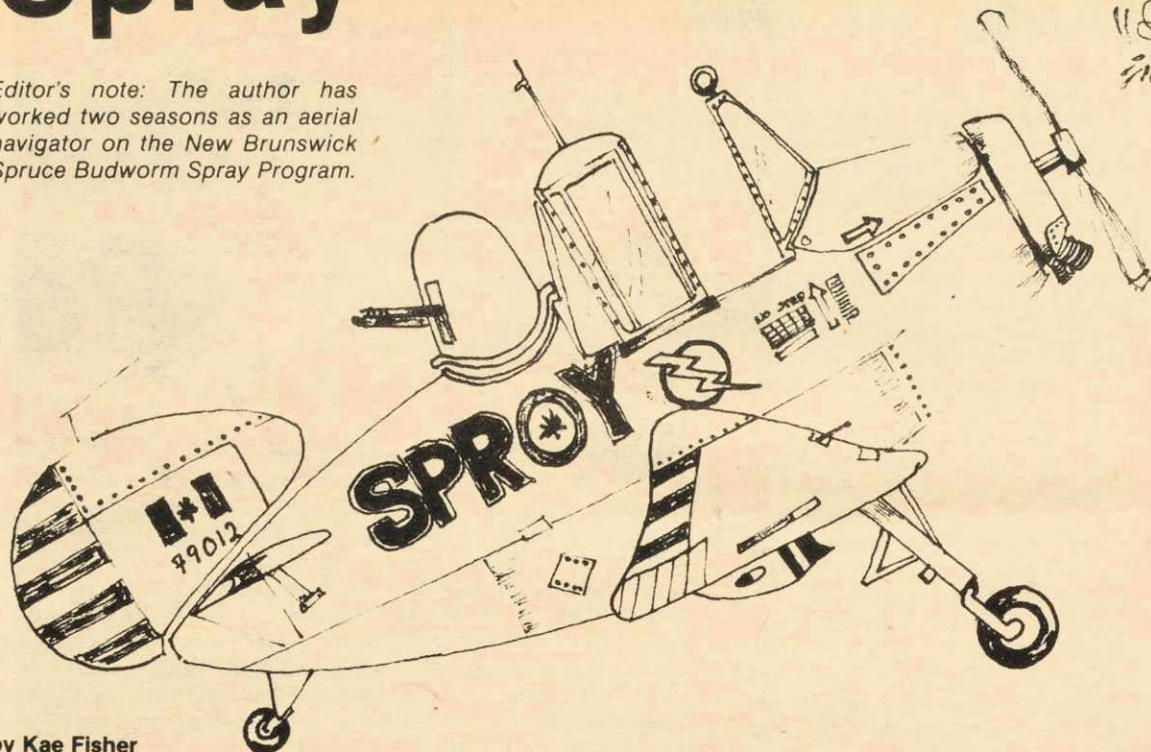


Spray

Editor's note: The author has worked two seasons as an aerial navigator on the New Brunswick Spruce Budworm Spray Program.



by Kae Fisher

The spraying in New Brunswick persists through considerable and visible public pressure. Planes have been shot at, demonstrators have lain down on runways and tried to sabotage planes on the ground.

Protest subsided several years ago after the Reye's syndrome link to budworm spraying had been fended off by the N.B. gov't as inconclusive. And it appears the government will be able to duck the ultimate question again.

Just recently, a Dalhousie professor added significant support to the contention that anti-budworm sprays can cause the rare children's disease, Reye's syndrome. However, Dr. Ken Rozee protested that his findings had been misrepresented by the media. Rozee, no doubt disturbed by a rather alarmist CBC documentary on spraying entitled *The Poison Mist*, hastened to qualify his research as 'significant', but not 'conclusive'.

This verbal splitting of hairs, courtesy of Dr. Rozee (already on record as having said he considers the problem no longer a scientific one, but a political and economic one) had merely granted the New Brunswick government a period of grace. The days of fenitrothion, the suspect spray, are numbered. The day that conclusive proof of the health hazards is announced, is the day the N.B. government may find itself morally obliged to discontinue spraying. The government would be foolish not to immediately throw all its energies and support behind the promising research in alternate anti-budworm methods currently under way in many labs.

For many it has long been a moral question. But morality and economics do not mix. In the cost-benefit analysis, the children lose out. In a narrowly developed economy built in the image of Irving-owned interests, the lives of a few children must seem like a necessary expense to ensure the survival of the economy. Without spraying, there would be no live forest within three years.

But the research into the effects of chemical sprays on humans has only begun. There is much that is not yet known.

For years the media has kept the budworm spray program under the hot lights of the public

eye. Only recently have they brought to our attention the use of possibly far deadlier sprays in New Brunswick. The herbicides 2-4 D and 2-4-5 T, two powerful cancer-causing dioxins have been outlawed in the United States since 1977. But they are used in New Brunswick, not to protect the forest, but to kill off hardwoods to make room for

nogenic herbicides. It might even mollify public opposition by at least discontinuing some of the sprays used.

However, forestry is not the only industry that uses potent chemicals. The agricultural industry is an even heavier user than forestry, according to UNB biologist Dr. Lucy Dyer. Dyer says 46

Morality and Economics don't mix in budworm program spray

commercially desirable softwoods. These sprays are suspected of causing birth defects, mutations and cancer, all of which are significantly higher in New Brunswick than in Nova Scotia according to statistics Canada data processed by CBC. The sprays used against the budworm however, do not appear to be carcinogenic. The only strike against them is a link with a rare children's disease which is not even as fatal as it once was due to faster diagnosis.

Budworm spraying is essential for the provincial economy. Herbicide spraying is not. The government could afford to take one precautionary measure to ensure the health of its citizens and discontinue use of the carci-

nogens. pounds of pesticides can be used per acre on apple crops, compared to only 2 or 3 ounces per acre in forestry. She cautioned that the threat to the groundwater supply in areas of heavy use, like the Annapolis Valley, should be carefully assessed. Also, the same carcinogenic dioxin 2-4 D used in New Brunswick to kill hardwoods is sprayed along roadsides in Nova Scotia to control weeds and shrubs. These are some of the other possible sources of exposure to dangerous chemicals.

Nevertheless the New Brunswick spray programs are outstanding by virtue of the ubiquitous extent of aerial spraying which reaches into almost every district in the province. Moreover,



the insecticides, disdainfully referred to as 'goop' by those who work in the aerial operation, can travel as much as 50 miles on the wind over populated areas.

Until there is a breakthrough, present practice will only be a series of half-measures. The harmless bacillus (BT) spray is used on small woodlots close to human settlement, and large buffer zones are rigidly enforced. Yet the considerable drift factor remains uncontrollable and reduces the effectiveness of protective buffers.

Meanwhile, research should have top priority. Researchers at UNB have had great success in the lab with pheromones, a hormonal substance which prevents the budworm from mating, but they expect at least two more years of research is needed before they will be ready to start aerial application tests. Researchers at the University of Guelph are testing to see how well a certain kind of parasitic wasp, which kills budworms, can control the insect population in a large budworm-infested acreage in northern Ontario.

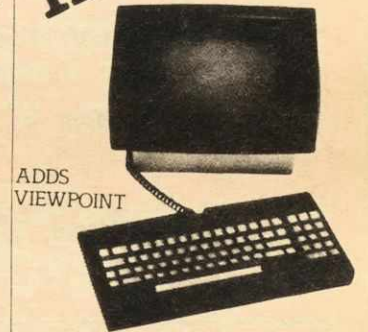
Although the days of dangers, of the chemicals used grab most of the headlines, problems in the actual spraying operation do not reach the public's attention. The spray program is entering its 30th season. Soon the old torpedo bombers from the second world war, presently resting with their wings folded, like sleeping birds, beside the runway at the Fredericton airport, will be tuned up and test flown for the new season. These TBM's are incredibly powerful and will-built planes but they are still over forty years old, and often subject to metal fatigue and sudden engine or hydraulic failure. Once loaded with almost 700 gallons of insecticide, the planes are too heavy to land and in case of mechanical failure or difficulty, the pilot must dump the load of chemical wherever possible. The dump site for years remains a bare dead scar on the landscape.

There may be protests and demonstrators again this year but the operation is prepared. Since the spray program became controversial a few years ago, the air bases have taken on a paramilitary appearance, with gate-controlled entrances and ID cards

for all personnel. The pilots and navigators on the spray project are somewhat obsessed with budworms, and large voracious-looking versions get painted on control towers, runways, planes and even end up on T-shirts.

But the proliferation of amusing caricatures hides a widely felt tension among those who direct the spray applications. They know the harm the spray can do, and it is no small sense of responsibility they bear. No one has yet been able to assure them that they are doing the right thing.

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