

A silent summer in Washington State

Colin Norman, Washington

THE US Environmental Protection Agency (EPA) has given the go-ahead for what could be the most extensive use of DDT in the United States since the pesticide was banned in 1972. After much soul searching, EPA Administrator Russell E. Train announced last week that DDT can be used this summer to control an infestation of Douglas fir tussock moths, whose larvae have already munched their way through nearly a million acres of fir forests in the Pacific northwest. Although Train said that his decision was reached "reluctantly", he had little choice in the matter.

The moth, which is endemic to the forests of Washington State, Oregon and Idaho, suddenly began a population boom in 1970, and has been eating up an increasing area of foliage ever since. Such infestations usually end in the third year from natural causes, chief of which is a virus infection which spreads through the eggs in the winter and kills off the larvae when they hatch in the summer.

But this population boom failed to follow the three-year pattern, and so timber producers, farmers and the US Forest Service (part of the Department of Agriculture), petitioned the EPA to lift the ban on DDT in order to spray the larvae when they hatch in late May and early June.

The agency was forced to capitulate to demands for DDT for a variety of reasons. First, it refused to accept a similar petition last year on the grounds that the infestation would be wiped out by natural causes, without any help from pesticides. When several hundred acres of denuded trees starkly underlined the moth's refusal to follow past trends, the EPA was made to feel rather embarrassed. Another unfulfilled prophecy this year would be even more embarrassing and would add considerable impetus to attempts by a few Congressmen to strip some authority from the EPA.

Second, there are no alternative pesticides on the market which are known to be as effective as DDT in controlling the moth—a fact which Train last week blamed on the Forest Service because its research and testing programmes "have been almost totally inadequate—to the point of dereliction". And finally, the EPA was under court order to make a decision on DDT use by March 1, which is too early to tell whether there is indeed any chance of a virus infection killing off the pest this year.

The EPA was, of course, reluctant to allow use of DDT on such a large scale because it does not want to open the floodgates to pleas for special treatment for other pest infestations. Thus Train made clear last week that "my approval of this contingency request should in no way be viewed as a departure from the principles of EPA's June, 1972 order cancelling most uses of DDT. I remain personally convinced that the use of DDT represents a significant risk to ecological systems and that its use should be avoided wherever possible".

Train says that he has, in fact, extracted a promise from the Forest Service that DDT will only be used if necessary. In other words, if laboratory and field studies indicate that the population will be wiped out in some areas from virus infection, then the DDT cannisters will remain unopened. The first indications of how the virus infection is progressing will come in the spring when egg masses collected last December are hatched in the laboratory.

If it turns out that DDT will be needed—and it can safely be assumed that the Forest Service will leave little to chance—then the EPA has laid down some fairly stringent rules. Spraying will begin when the eggs begin to hatch in late May, and end by the beginning of July. The pesticide will be applied by helicopter, but an unsprayed buffer strip must be maintained along streams and rivers, no spraying can take place in winds greater than 6 miles an hour and public warnings must be placed in all areas to be sprayed.

Apart from being somewhat embarrassed that their predictions of an imminent collapse in the tussock moth population failed to materialise last year, some EPA officials are also annoyed that DDT spraying has become necessary at all. One official pointed out last week that although the US Department of Agriculture itself banned use of DDT on forested areas in 1968, the department has failed to sponsor an adequate programme to develop alternative pesticides. It was only last summer, in fact, that large-scale field tests of alternatives were conducted, and even then no comparative tests with DDT were conducted. Consequently, EPA has no statistical evidence on the efficacy of DDT.

Train has therefore required, as a condition for approval of DDT use this year, that the Forest Service must undertake a "fully funded, comprehensive research effort on tussock moth control which will support registration of effective and environmentally acceptable alternatives to DDT next year".

Medical museum to move?

Fiona Selkirk

EXHIBITS from the Wellcome Trust's History of Medicine Museum may soon find a new and permanent home in the Science Museum. The Wellcome collection, assembled by Sir Henry Wellcome, contains many fine examples illustrating medical and social history, some early microscopes of excellent quality, fearsome yet interesting surgical instruments and about 200 pestles and mortars, in addition to Sir Henry's more personal collection of horse brasses and the like. The vast medical collection is very valuable and well worth exhibiting.

For many years the Wellcome Trust has been reorganising the museum and the library associated with it, and it has finally come up with a proposal which, with approval from the Department of Education and Science (DES), will mean the wholesale removal of the museum collection, but not the library, to the care of the Science Museum. (Specimens from the History of Medicine Museum can be seen in a current exhibition at the Science Museum, and in July more exhibits will be included in a display commemorating the bicentenary of the discovery of oxygen.)

Unfortunately, it seems that the Science Museum will have to do what the Wellcome Trust is forced to do at the moment—store between 85% and 90% of the collection—but if the proposal is accepted and all goes according to plan, by the end of 1976 there will be a gallery with 10,000 square feet of floor space, for a permanent exhibition of medical history.

At present, the students of medical history who use the facilities of the Wellcome museum and library have full access to the museum specimens in store. A spokesman for the Science Museum said that if all goes ahead, it is hoped to provide the same, and possibly even better, facilities—although, of course, without immediate access to the library.

The DES, which will have to approve the plans for financial reasons, has been kept informed but there have been no definite talks about the final proposal yet.

The Wellcome Trust awards grants for scientific, medical and clinical research, primarily in areas which do not receive large amounts of money from such grant-awarding bodies as the Medical and Science Research Councils. Of a total of nearly £2 million allocated in grants in 1972-73, about £350,000 (18%) went to history of medicine, but the trustees thought that no more