

DDT AND THE SPRUCE BUDWORM

INSECTICIDE WAR TO BE WAGED NEAR LOS ALAMOS AGAINST TINY FOREST KILLERS

Obviously concerned about public opinion, the U. S. Forest Service last week called a news conference in Santa Fe to explain why it will be necessary starting in the next few days, to spray nearly a half million acres of New Mexico forests with DDT.

Chief cause of their concern is Rachel Carson's recently-published best-selling book "Silent Spring," a well-documented indictment of the use of insecticides.

If they didn't quench all doubts about possible adverse effects the poison might have on fish, wildlife and humans, the Forest Service officials presented an all but indisputable case for the need of spraying at this time.

Dahl Kirkpatrick, assistant regional forester for timber management from Albuquerque, said 470,000 acres of the Carson and Santa Fe National Forests west of the Rio Grande River are infested by the tiny spruce budworm. The caterpillars have already killed many fir and spruce trees. The infestation extends to the fringes of Los Alamos.

The Forest Service had hoped that natural enemies would control the budworm, Kirkpatrick said, but studies over the past several years have shown that chemical control is necessary "to give nature a helping hand."

Contrary to its name, the spruce budworm prefers the needles of fir to

spruce. The greedy caterpillars are not restricted to New Mexico, but are found in most of the United States and Canada.

After the 15 to 20-day spray operation, Kirkpatrick said, the Forest Service is confident the infestation in New Mexico will be controlled and no additional spraying will be necessary for at least several years.

This year's spraying is not a new program but is an extension of one begun last spring when 445,000 acres of infested fir and spruce east of the Rio Grande was sprayed by airplanes and helicopters. Kirkpatrick said more than 98 per cent of the budworms in that Sangre de Cristo area were killed and they are now completely under control.

This year, only helicopters will be used in spraying the forests. They will at times be seen from Los Alamos in the early mornings when spraying areas almost adjacent to the community. Those working on the Santa Fe National Forest will operate out of the Santa Fe Airport. Helicopters spraying Carson National Forest will be based in Alamosa, Colorado. Contractors have been selected to perform the spray missions.

The Federal Pest Control Review Board, headed by Chairman Robert J. Anderson, MD, U. S. Department of Health, Education, and Welfare, reviewed the project and approved it on May 9.

The spray will be applied from the air at the rate of one pound of DDT in a gallon of fuel oil per acre. At this mixture, Forest Service people say, the DDT is unlikely to harm wildlife. As added safety measures, strips will be left unsprayed along lakes, streams, and meadows; only one-half pound of DDT per acre will be used adjacent to unsprayed strips; spray operations will be stopped whenever the wind is blowing more than six miles per hour.

The Forest Service will make observations on both fish and wildlife after the spraying program is completed. Kirkpatrick said a careful survey was made on the possible effect of DDT

spray on the fish caught in the areas sprayed last year. He said no fish were killed.

The Baca Location, a 100,000-acre square tract, almost in the middle of the infested Santa Fe forest area, and two smaller privately-owned areas near Eagle Nest, will not be sprayed. Forest Service officials explained that the government can spray private areas only if the owners will pay 75 per cent of the costs and the owners have refused. Costs are estimated at \$1 per acre.

Kirkpatrick said the budworm has destroyed more timber than have forest fires in the last decade. He said the spraying must be done in a period of about 20 days when the budworms, in the larva stage, are feeding.

Among those supporting the program is Dr. Stanley J. Leland, state health director. Dr. Leland said the spraying poses no threat to humans either through direct contact with the DDT or by eating wildlife which has come into contact with the spray.

"I'm here to deny that Rachel Carson ever existed," Dr. Leland told the **LASL News**, upon his arrival at the news conference.



Nearly a half million acres of northern New Mexico will be sprayed with DDT this month to kill spruce budworms like these. This photograph and that on our cover were taken by Julie Langham, H-DO, through a microscope.