

A Science Service Feature

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? WHY THE WEATHER ?

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Authority on Meteorology.

HIGH-AIR POLLEN

The annual "census" of ragweed pollen in the air of the United States and Canada, conducted by O.C. Durham, was carried out on a larger scale than ever during the season of 1931, and the results have just been published. The figures are obtained from a microscopic examination of vaseline-coated slides exposed daily during the ragweed season at selected stations of the U.S. Weather Bureau and the Canadian Meteorological Service.

Some years ago, under the auspices of the late Dr. William Scheppegrell, pollen counts were made at high levels of the atmosphere in Louisiana by means of plates exposed in airplanes, and a similar investigation was carried out last year, with the aid of the U.S. Department of Agriculture, in order to determine the extent to which a large body of water -- in this case, Lake Michigan -- affected pollen distribution.

"The wind," says Mr. Durham's report, "was blowing from northwest and north-northwest at a surface velocity of two miles an hour, and a velocity at 4,000 feet of ten miles an hour. A double flight was made; one being over the land northwest of North Chicago and the other over the lake, thirty miles east of North Chicago. On this day it was found that the bulk of the pollen over the land was below 1,500 feet, although a small amount was encountered as high as 8,000 feet. Over the lake a heavy concentration was found at 2,000 feet, and what seemed to be a separate pollen cloud at 100 to 500 feet.

"The totals of the two series of slides showed that midway across Lake Michigan the air contained about 85 per cent. as much pollen as existed over the land. No doubt descending air currents drop a large amount of pollen into the lake, but it is altogether probable that a considerable amount finds its way across."

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