

A Science Service Feature

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? WHY THE WEATHER ?

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THE CLIMBING SPEED OF SPRING

How fast does spring climb the hills and mountains? If a peach tree, for example, blossoms on May 1 at a certain altitude, when will blossoms appear on another peach tree in the same locality but a thousand feet higher? Is there anything like a constant relation between differences in the dates of spring events in the organic world and differences of altitude?

One man who has attempted to answer such questions is Dr. A. D. Hopkins of the U. S. Bureau of Entomology. On the basis of many records in various parts of the country he formulated what he called the "bioclimatic law," according to which the progress of spring, as indicated by the responses of plant and animal life to the rising tide of temperature, is northward, eastward and upward at an average rate of one degree of latitude, five degrees of longitude and 400 feet of elevation every four days. This law is only a broad generalization, subject to many local and temporary exceptions, but it gives us at least a rough idea of the speed at which spring travels both horizontally and vertically.

The figure for the vertical speed does not differ greatly from that found by the brothers Schlagintweit for plants in the Alps; viz, 300 meters (984 feet) every ten days. In France Angot found a retardation of the time of leafing and blossoming of plants, as well as of harvesting, of four days for every 100 meters (328 feet); which departs somewhat more widely from Hopkins' figure.

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