

PUBLIC HEALTH

Hope to Vaccinate Farmers in Spotted Fever Area Next Year

ALL FARMERS in the area around the National Capital will be vaccinated against Rocky Mountain spotted fever next spring, if the U. S. Public Health Service is able to carry out its present plans. Every year some two hundred cases of this disease occur in the District of Columbia and adjacent states.

Officers of the U. S. Public Health Service, who have successfully fought the disease in Bitter Root Valley, Montana, where it first appeared, have recently found that a certain variety of tick, which abounds in the neighborhood of the capital, also carries the germ of the disease. Farmers, holiday-seekers and others who get into the bushes and high grass of the surrounding countryside are liable to contract the disease through being bitten by infected ticks.

The infected area contains a population of about four million. It is impossible to vaccinate the entire population of this area, as has been done in the Bitter Root Valley which has a population of only a few thousand. Furthermore, most people in the Washington area never get into the country where they would be exposed to the disease. The U. S. Public Health Service has warned them that if they do go into the country, they should keep away

from the bushes, trees and weeds, and watch for the ticks, picking them off as soon as possible. But for the farmers of the area who must be constantly exposed to the danger, the Federal health officers hope to be able to offer immunity through vaccination.

At present the supply of vaccine against Rocky Mountain spotted fever is small. It is both expensive and dangerous to make. No commercial firm will handle it. Several of the Federal health workers lost their lives in producing the vaccine at the Montana laboratory. The vaccine gives immunity to the disease for about one year, and would be given in the spring in the Washington area, as that is the beginning of the season when the infected ticks appear. The end of this season's outbreak in the East is expected within the next two weeks, as at that time the cooler weather will have killed off most of the ticks.

Rocky Mountain spotted fever has been prevalent in the Washington area since 1909, health officials believe, although it was not recognized as such until recently.

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Among the fruits from which the ancient Romans got their vitamins were apples, pears, plums, grapes, peaches, apricots, and cherries.



Thistle Butterfly

WHO TOLD the thistle butterfly that its light browns and subdued yellows set it off so advantageously against the electric blues and light purples of its favorite flower? No lady of fashion could more skilfully set her gown against her background.

Popular nomenclature was at one time not kind to this bright insect. A widely used name for her is "painted lady"—once a designation of not-quite-nice connotation, but now, since practically all ladies are painted, largely deprived of its sting. Scientists call her, most euphoniously, *Vanessa cardui*. The last, or specific, name refers to her favorite food plant, the thistle, whose botanical name is *Carduus*.

The thistle butterfly is devoted to the thistle not only when she is a grown insect with wings to travel on and good eyes for choosing between flowers. At an even more important time, during her caterpillar infancy, she depends on the thistle exclusively. Hatching from her egg on the surface of a thistle leaf, she crawls underneath and spins a little tent for herself. After feeding until she has outgrown it, she returns to the top of the leaf and spins a larger dwelling, and finally a third and further augmented one. All the time she battens on the leaf tissue. Philosophizing naturalists, who like to point out the preference of asses for thistle leaves, might well take note of the competing taste of these smaller animals.

It is the common belief among entomologists that the thistle butterfly hibernates as a grown butterfly, at least in the United States, but its winter hiding place has never been discovered.

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