

PUBLIC HEALTH

# Yale Experiments Show Virus Diseases Carried Through Air

THE OLD BELIEF that diseases are carried through the air is substantiated for at least one group of contagious diseases in recent studies made by Dr. Merl G. Colvin of the Yale Medical School. Ordinarily it is supposed that micro-organisms will not travel through the atmosphere unless attached to droplets of moisture so that an individual must come comparatively close to an infected person or come in direct contact with something with which the patient has had contact in order to contract the disease.

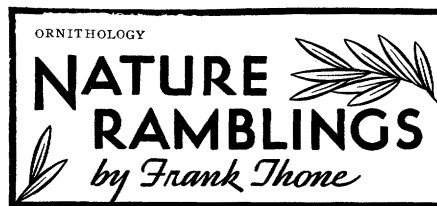
The group of diseases known as the virus diseases, of which chicken pox and measles are common examples, are supposedly caused by minute ultra-microscopic forms so small that the ordinary microscope does not magnify enough to show them. The viruses themselves are difficult to handle in the laboratory. Bacteriophage, however, which approximates the size of the

viruses, is comparatively easy to handle and so has been used by Dr. Colvin as a test agent in a study of the spread of virus.

Dr. Colvin has been able to measure the distances which bacteriophage travels through the air, the speed at which it travels, and finds, contradictory to the common belief, that it traveled some 35 feet from his laboratory in five minutes. Not only that but bacteriophage lurked in the dust of his room for at least 18 days. After a thorough sweeping and mopping of the room there was more phage in the air than before, which, according to Dr. Colvin, shows the inefficiency of certain modern cleaning methods.

While there are differences between bacteriophage and viruses, Dr. Colvin feels that it is more than probable that virus diseases may be air-borne and that this may in part explain why they are so very contagious.

*Science News Letter, July 23, 1932*



Bobwhite

OUT WEST, grasshoppers are helping themselves to the grain. Bobwhites eat the grasshoppers. Presently we shall eat the bobwhites. Thus do we get a little of our own back again.

In ancient times, when people believed that they and other creatures partook of the nature of the food they ate, the bobwhite would certainly have had his behavior when hunted ascribed to the leaping insects that form a part of his diet, so close does he lie while you approach and so suddenly and unexpectedly does he fly when finally flushed. He needs a quick gun to get him.

It is sad, but true, however, that in some parts of the country the bobwhite is losing ground. Too thorough cultivation in parts of the West, and his own inability to withstand severe cold in New England, is thinning him out. Game refuges and stiffer closed seasons for a term of years may help him to come back where the plow has conspired with the gun to cut him down: but his increasing absence from New England seems to be more a matter of his own choice, for cultivation has been decreasing in that area.

There is nothing to do when he goes but replace him with hardier, more prolific birds, such as the European pheasant. But old-timers think little of the pheasant as compared with their favorite, and oppose letting the alien in while the bobwhite has any chance at all of recovering. Artificial propagation has been proposed, but has not as yet proved practical, partly because the birds do not stand penning at all well, and partly because they are so expensive—\$10 to \$15 apiece is said to be no unusual price. The best we can do, it seems, is to help Nature to take her own course.

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## The Eclipse of Aug. 31, 1932

*(total over portions of New England and Canada)*

—has commandeered a whole issue of the Science News Letter. So next week's News Letter, for July 30, will be the

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