

heavy rains which followed soon after the mixtures were spread made it impossible to make important observations as to the death counts. On June 17, mixture No. 6, as above, was spread in a field of oats. Five days later three counts only were made owing to a misunderstanding and these gave 300, 305 and 328 dead to the square yard. A heavy rain and wind storm took place between 3 p.m. and 9 p.m. on June 17, and undoubtedly many locusts which had fed on the mixture in the early morning were poisoned and later washed away by the deluge. On June 28, mixture No. 1 distributed over a pasture field resulted in an average of 129 dead locusts to the square yard. Sixteen counts were made across the field and on the date mentioned many of the insects were in the winged condition. On June 25 I visited Lanoraie and in a field of rye in which mixture No. 3 with shorts used instead of bran large numbers of dead insects were observed. The following counts in different parts of the field were made, 220, 635, 408, 235, 195, 523, 609, 395, 259, an average of 386 dead to the square yard. Dead locusts were found in numbers as far as 249 feet from the treated field.



Part of abandoned farm, Valmont, Que., now a breeding ground for locusts.
(Original.)

ORGANIZATION AND CO-OPERATION NECESSARY TO CONTROL LOCUSTS OVER WIDESPREAD AREAS.

In 1915 the value of early organization to control serious outbreaks of locusts was strikingly illustrated in the Province of Quebec. In the Parish of St. Etienne de Gres where our Entomological Circular No. 5 had been freely distributed, and where control work had been conducted in 1914, the farmers organized under the immediate direction of Father J. I. Trudel, the resident Parish Priest and Agricultural Missionary. In this parish, practically all farm land—estimated at over 21,000 acres—was treated with mixture No. 1, using Paris green, however, in the strength of $11\frac{1}{2}$ pounds for each 20 pounds of bran. The bran, Paris green, molasses and lemons were purchased in large quantities at wholesale rates, and the mixture distributed over the land during the week beginning June 4, at which time the locusts were from one-quarter to one-half an inch in length. Counts made a few days after the application in various