

age of freezing the insects by opening the mills to the cold of winter was pointed out, among other remedies.

The Cigar Case-bearer of the apple was first treated of in his annual report for 1891, and further original observations are to be found recorded in his report for 1894.

The Hop Vine Borer did much harm in Ontario hop fields in 1892. The habits of the insect were studied and published. The same year new facts were learned regarding the life-history of the Red Turnip Beetle, which every year does some damage to cruciferous crops in the Prairie Provinces.

The Pea Moth claimed special attention in 1894, and a lengthy article was published in his annual report for that year. The Peach Bark-borer was also studied the same year and new facts recorded regarding the life-history.

In 1895 the Joint-worm which attacks wheat was investigated, and valuable information was obtained on the habits of this enemy of this important cereal. The Cottony Grass Scale was also studied the same year, as was also the New York Plum Scale.

Mention of the Wheat-stem Maggot in Canada first appeared in his 1896 report when an outbreak which occurred in the Northwest was studied. The same year the first record of the Apple Maggot in Canada was made.

In 1897 much study was given to the San José Scale, which had gained a firm foothold in certain of the western counties of Ontario. A lengthy article appears in his report for that year.

The Rocky Mountain Locust was given special study in 1898 when the insect did much damage in southern Manitoba.

The Hessian Fly wrought serious injury in the fall wheat fields of Ontario, and the spring wheat fields of Manitoba in 1899, and called for special investigation. The same year the Destructive Pea Aphid made its first appearance in Canada, as did also the Asparagus Beetles.

The Greenhouse Leaf-tyer was also studied in 1899 and 1900 and the life-history has since been published.

One of the most remarkable outbreaks of an injurious insect which has ever been recorded in Canada occurred in 1900, when the Variegated Cutworm appeared in British Columbia. Original notes on the life-history appear in his annual report for that year, as also on the Spotted Cutworm which did much damage in Ontario.

In 1901 original observations on the life-history of the Variable Cutworm were published and a more complete article describing in detail the various larval stages appeared in the Canadian