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our forest trees sonii. The first short note pub-

ety, and Abbé Pro-228), states that he dished in the Canadian Entomologist for 1881 (Vol. XIII, p. 37), on some larvæ collected in 1880, by Prof. Sargent of the United States Census, Forestry Division, from European larch trees growing in the neighbourhood of Brookline, Mass. The first notice of its occurrence in Canada was the announcement made at the annual meeting of the Entomological Society of Ontario for 1883, by the Rev. T. W. Fyles, of South Quebec, to the effect that much injury had been done during 1882 and 1883 to the tamarac trees (Larix Americana) in the eastern townships, particularly in the townships of Bury and Fingwick, by a species of saw-fly, which he thought was probably the same as that which had caused so much injury in Maine and the other Eastern States, Nematus Erichsonii. Mr. Fyles was at that time living at Quebec, and from the fact that he did not mention having found the species in that locality it may be inferred that it had not reached there then. In the Quebec Morning Chronicle of the 16th July last, however, Mr. Fyles publishes a letter in which he states that the tamarac trees at Beauport, near Quebec, had been nearly stripped of their foliage by the larvæ of this insect, and in travelling from Ottawa to the Lower Provinces, in the month of July, I observed almost all along the line of railway that an enormous amount of damage had been done to the tamarac trees. For miles not a tree of this species could be seen that did not bear umistakable signs of their presence. At first, not knowing the appearance of the trees after they had been defoliated by these larvæ, I supposed that the brown appearance had been caused by forest fires, which are by far too frequent in Canada; but after a time a clump of trees occurred close to the railway and I was able to detect the true cause of the injury. The trees about Quebec seem to have suffered most severely, and from this point, proceeding east and west, the ravages appear to diminish. In the Eastern Townships I found the tamaracs badly injured. Through the kindness of S. A. Fisher Esq., M.P., I was enabled to examine some trees near Brome, P.Q., which were almost defoliated by these worms. The tops of the large trees and all young trees which stood alone, away from the edge of the swamp, were entirely bare, on many of them there was not a green needle to be seen. I think it is hardly probable that these trees will be able to survive, for they did not throw out any later leaves towards the end of the summer. Among the trees destroyed this year were some small dead trees which had presumably been killed the previous season, for the terminal shoots of the branchlets were twisted and distorted in the manner peculiar to the attack of this pest. Some interesting specimens of twigs were sent to me from Quebec, by the Rev. Mr. Fyles, in the month of October, in which the tree had succeeded in pushing out the leaves which had been eaten down by the Nematus in July, to the distance of about a quarter of an inch. It is just possible that the trees may survive the attack, unless it is again repeated next season, for these leaves, although insufficient to perform the full functions of the foliage to the plant, may yet have stored up enough food to support the tree until the next season, when the marauding army having passed on to more abundant feeding grounds, will allow the weakened trees to regain their vigor, the very severity of the attack working a partial remedy. The instinct of the parent fly will prevent it laying its eggs where there is an insufficient food supply to carry the progent to maturity. The most western point so far recorded for this insect is Alexandria, on the Canada Atlantic Railway—miles from Ottawa, this, too, is the nearest point to Ottawa where I have observed the injury to be sufficiently great to attract attention. At Casselman, 30 miles from Ottawa, by searching closely I found a few twigs which had been punctured by the female for the reception of the eggs; and at Ottawa itself, one twig was found distorted in the characteristic manner. From these facts, and the remarkable rapidity with which this destructive insect has spread over the continent during the past four years, I fear that by next year the tender green foliage of the larches in this locality will be destroyed, and the trees rendered as unsightly as they were in Quebec and New Brunswick last year.

Below Quebec, along the Intercolonial Railway, particularly about Chaudière Junction, by the middle of July, there was not a leaf to be seen on the tamarac trees. Soon after leaving Chaudière Junction the country is open and there are no trees to be seen for a long distance. It was not until the Province of New Brunswick was entered that I again had a chance to notice the ravages of this insect. During a short visit to Dalhousie, N.B., I had a good oportunity of observing the work and life-histories of these Jarvæ closely. The first evidence that I saw of the presence of the insect was a row of