

solution through a fine wire gauze to divide it finely. But a still more effectual method of destroying the younger larvæ is to crush them with a gloved hand. For this method to be carried out rapidly and to secure the best results, the larvæ must be carefully watched until they reach the stage where they congregate in masses, that is, about the third and fourth larval stages; in this stage of the life-history I have counted as many as sixty larvæ in a single mass, all of which could be easily destroyed by a single closing of the hand. If they are dealt with in this manner a number of men can quickly clear a plantation of young trees from five to eight years of age. Spraying might be restricted to the slightly older trees whose upper branches are out of reach. Hand-picking also proved very effectual in the case of young trees.

In the older plantations it is necessary to rely on natural means of control, such as have been mentioned already. Some natural means of control, however, can be assisted and augmented, and such is the case with regard to the birds which have been mentioned as feeding on the larvæ; chief of these are rooks, starlings, jackdaws, and tits. In the districts where the trees are badly attacked these birds should not be destroyed on any account. The starlings and tits should be encouraged and protected by feeding them during the winter and thus preventing the customary great mortality which results from hard weather, and also by the provision of nest-boxes in the plantations. Larch plantations are singularly devoid of suitable nesting places for these birds and they should therefore be supplied. In England these insectivorous birds are not sufficiently encouraged in places where nesting sites are absent by the provision of nesting boxes, the value of which form of forest protection has been recognised for a number of years in Continental forests. The best type of nest-box is that designed by Baron von Berlepsch.*

As the Field Vole, *M. agrestis*, has been shown to be an important means of control by destroying the larvæ in the cocoons, it would be in the interests of the forester not to destroy the vole until the saw-fly attack shall have subsided. If it is found that they are increasing to any alarming extent and attacking

* "How to Attract and Protect Wild Birds," by M. Hiesemann. Translated by Emma S. Buchheim. London: Witherby, 1908.