

Acadia National Park
Insect Situation in 1936

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A general survey of the insect situation in Acadia National Park was made on August 20 and 21, 1936. In the time available it was impossible to travel over all the automobile roads, carriage roads, and trails in the park, but it is believed enough of the area was covered to observe and note infestations or injuries caused by the more important insect pests.

The collaboration in this survey by Dr. A. E. Brower, Entomologist in charge of the Field Station maintained by the Maine State Forest Service at Bar Harbor, is gratefully acknowledged.

The National Park Office at Bar Harbor was visited and this project was discussed with Assistant Superintendent Hadley.

Mr. William Parsons, Forester and Acting Superintendent of the CC Camp in the park, guided us to an infestation of the European beech scale which he had recently found.

The insect situation for 1936 based on observations at infestations or of the injuries by the more important insect pests may briefly be summed up as follows:

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Alsophila pometaria Harr. (Fall Cankerworm) - In 1935 there was an outbreak, 3 to 4 acres in extent, in a stand of mixed hardwoods between Newport Mt. and Ocean Drive. This infestation is on the decline and no serious defoliation occurred in 1936.

Coleophora laricella Hbn. - (The Larch Casebearer) There has been a decrease in intensity of infestation generally throughout New England. The present condition of the larch foliage in vicinity of the Acadia Park indicates there has been a decided decrease here.

Coleophora salmani Hein. - The infestation by this casebearer on paper birch is rather slight. One center of infestation was noted around the Sand Beach parking area, though not serious enough to warrant control measures.

Cryptococcus fagi (Baer) Dougl. (The European Beech Scale) Prior to August 1935 a few beech trees were found infested near junction of a carriage road and MacFarland Trail west of Eagle Lake. These were removed and burned. At the present time some six or seven trees in the same locality are lightly infested.

An infestation reported by Forester Parsons in what is known as the Gorge area, off auto route from Bar Harbor to Otter Creek, just east of Dry Mt. of the Flying Squadron and along trail south of the Tarn, was examined. This is in an old growth of mixed hardwoods (beech, maple, yellow and paper birch) and several of the beech trees are heavily infested. It is estimated this infestation extends over about two acres. No Nectria or slime fluxes were observed, and at present the trees do not show any serious injury.

Considerable of the mixed hardwood stands in the park contain some beech and as the two infestations of C. fagi observed are widely separated, it would seem that a close examination might turn up other centers of infestation.

Diprion polytomum Hartig. - (European spruce sawfly) Indications are that this pest is scattered through all the spruce areas. On the side of Cadillac Mt. 3/10 mile from junction of Summit Road and Eagle Lake Road, 30,000 Microplectron fuscipennis, parasites of this sawfly, were liberated in the afternoon of August 20th. Based on the number of cocoons of D. polytomum found in the duff at this point, the infestation can be considered only as light. No noticeable feeding observed.

Fenusa pumila Klug. - (Birch Leaf Mining Sawfly) This insect attacks the foliage at the tips of the branches of gray birch and paper birch, and the mined leaves turn a light brown in color. The work of this pest is particularly noticeable throughout the park.

Phyllotoma nemorata Fall. (Birch Leaf Mining Sawfly) Both this and the preceding are imported pests and both are miners of paper and gray birch leaves. This species is present in considerable numbers throughout the park although not abundant enough to cause any appreciable injury, and in general, to the casual observer, not as noticeable as Fenusa pumila especially on the gray birch trees and sprouts.

Haltica bimarginata Say.

Most of the speckled alder foliage is badly skeletonized by this insect.

Paralechia pinifoliella Chamb. (Pine Leaf-Miner) On both sides of Summit Road about half way up the side of Cadillac Mountain is a considerable area of pitch pine trees which are quite badly infested with this needle-miner.

Rhyacionia comstockiana Fern. (The pine pitch moth) The characteristic pitch masses caused by this twig borer are quite common on the pitch pine trees noted above as infested by the needle miner.

Porthetria dispar L. (The gypsy moth) Male moths were observed flying through the stand of pitch pine on the side of Cadillac Mt., also in a hardwood stand, principally red oak, along the carriage road on westerly side of Eagle Lake. A few old and new egg clusters were found at the latter place on dead branches and fallen trees back of the strip thinned along the carriage road. These infestations are extremely light and the larvae had not been abundant enough to cause any noticeable feeding.

Pristiphora geniculata Hartig. (European sawfly on mountain ash.) Defoliation by this insect noted as common on the mountain ash in the park.

Saperda calcarata Say. - The work of this poplar borer is very common in a stand, mostly of the small toothed aspen, near the public camp grounds in the park. A few trees have died as a result of this borer.

Xylococculus betulae Perg. This insect apparently is common in some sections of the park and has been the cause of disfiguring many of the paper birch trees.

Adelges piceae Ratz. (Balsam Woolly Aphid)

This insect has not increased to any great extent since the severe winters of 1933 and 1934. Apparently not serious at the present time. There is an improvement in the general appearance of the balsam fir since one year ago.

of linseed oil (or fish oil) to 100 gallons of water. In either case agitate the insecticide and water first, and then add the oil.

Pristiphora geniculata Hartiz. - To protect the foliage of mountain ash ornamental or shade trees against this sawfly, use either of the sprays recommended for the control of the spruce sawfly (D. polytomum). The spray should be applied in June as soon as the foliage is well opened.

Porthetria dispar L. (The gypsy moth) Much of the growth in the park is unfavorable for the increase of this insect and together with the natural control factors, including the weather, lessens its potentialities as a serious menace. In all improvement thinnings this insect should be considered and it is advisable to remove as much of its favored food as possible, including such trees as aspen, gray birch, speckled alder and oak.

Artificial control need be considered only in areas containing a large proportion of the favored food plants. In creosoting the egg clusters care should be taken in searching for those beneath stones and on debris on the ground as the clusters covered by snow or ice during the cold weather usually produce a good hatch.

It is believed the above recommendations cover the major insect pest problems in the park at the present time, and that artificial control measures are impractical or unnecessary this year for all other insects mentioned in this report.

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