

second joint has lengthened in proportion to the first, so that the average proportions are preserved, although the palpi are extremely long. In *B. sonorus* the first joint is relatively short (about as long as in *pratorum*, *hypnorum*, etc.), but it is nevertheless over $4\frac{1}{2}$ times as long as the second.

(7) It seems probable that the only oligotropic bumble-bees are those with extremely long tongues, adapted to certain species of aconite. The American species probably all visit miscellaneous flowers, and this must be especially true of the Arctic species, which have nearly a monopoly (so far as bees are concerned) of the flowers of their region. Thus, *B. Kincaidii* is the only bee on the Pribiloff Islands, where brightly-coloured flowers abound.

NOTE ON PITYOPHTHORUS CONIPERDA, SCHWARZ.

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This species was described in the Proceedings of the Entomological Society of Washington, Vol. III., p. 144, 1895, and the author stated: "I offer herewith a description of this species, being solely tempted thereto by the interest attached to its life-history; for, as far as I am aware, there is no other Scolytid known which normally develops within the cones of pine trees." Possibly since that time a similar habit may have been observed in regard to other members of the Scolytidæ, but I cannot recall any reference to such observations. The beetle in question was first collected by me on May 24, 1884, and its capture was quite accidental. Mr. Fletcher and myself had that day visited a grove of white pines on the Gatineau, a few miles north of Ottawa, with the special object of collecting the somewhat rare little butterfly, *Thecla Niphon*, of which we succeeded in capturing several good specimens. Having climbed up into one of the pine trees, to try and net a butterfly which had settled up aloft, I noticed that the young buds at the tips of the twigs were injured by some insect. Investigation showed that one of the bark-boring beetles was at work, and a few specimens were collected. These were determined for me as *Dryocætes affaber*, and were referred to by me under that name in notes on Canadian Rhyncophora in the CANADIAN ENTOMOLOGIST, 1891, Vol. XXIII., p. 26. At Aylmer, Que., about eight miles above the city, on the Ottawa River, on June 25, 1887, while seeking, with my friend Fletcher, upon red pines for *Podapion gallicola*, we found the shoots and cones seriously infested by a Scolytid, which appeared

slightly larger, but which proved to be the same species. The infested cones were shrivelled and hard, and their development was entirely arrested. The following year similar observations were made in the same locality, and similar infestations were noted in subsequent seasons. On May 26, 1901, I examined some white pines not far from the locality where the beetle had been first noticed in 1884, and found that there was a serious infestation of the cones. The ground beneath the trees was strewn with aborted and undeveloped cones, which were compact and hard, about three inches in length, but only one-half inch in diameter. On breaking open any one of these, *P. coniperda* was apparent and its burrows running through the resinous compacted scales. In one cone I observed a small bright Chalcid, but, unfortunately, it dropped in the grass and was lost, much to my regret, for it was evidently a parasite of the beetle. With the hope of obtaining specimens of the Hymenopteron, I took home some of the cones, but no flies appeared. After it was apparent that there was no probability of any insects emerging, I broke up the cones, which was not an easy matter, owing to their hard, resinous condition, but could find no trace of any of the parasites. Some beetles were obtained (all dead), but many of them were broken in digging them out of their burrows or in tearing apart the cones. As was mentioned in my former note on this species, the beetles remain continually in the cones; none of them emerged of their own accord. While other members of our Scolytidae may be found flying about, some species in great abundance, I have never met with this species at large, although it must be fairly abundant and widely distributed. Probably on account of this habit of concealment, it does not fall a frequent prey to our collectors, as I have not found it in collections sent to me for examination. That excellent entomologist, the late Dr. John Hamilton, with whom I had the privilege of corresponding for several years, obtained the species at Sparrow Lake, Ont., and published an interesting note upon it in CANADIAN ENTOMOLOGIST, 1893, Vol. XXV., p. 279. The species is not so destructive as many others of the Scolytids, but apart from its arresting the growth of the cones and the development of the seeds, it causes a certain amount of injury by its infestation of the young shoots. Schwarz records it from Michigan, Virginia, New York and Pennsylvania, proving that its range is an extensive one. I may add that my only specimens of true *Dryocetes affaber* (determined by Dr. Hopkins) occurred upon spruce.