

is also an endemic genus of the Vancouverian strip, *Leptura obliterata*. *Tetropium velutinum* and *Pachyta armata*. Fifty-three per cent or by far the larger proportion are of northern origin and of circum-polar or wide North American distribution. This percentage includes *Tragosoma harrisi*, *Pachyta lamed*, *Anoploclera canadensis* and *A. chrysocoma*, to mention only a few.

BUPRESTIDAE

This family has much the same relation to the adjoining territory as the Cerambycidae. The species have a wide continental range, with the exception of *Chrysobothris pseudotsugae* and *Buprestis aurulenta*, which are confined to the Pacific coast. *B. confluenta* appears to reach its western limit in the park area.

Mr. Stace Smith lists 22 species from Copper Mountain, as compared with nine Copper Mountain species will eventually

from Manning Park; probably all of the be found to occur in the park area.

SUMMARY.

Thirty-three species of Cerambycidae and nine species of Buprestidae were taken in the area during the period of July 21 to August 16, 1945.

From a distributional view point the Cerambycidae constitute about 30 per cent west coast or Vancouverian strip. The remaining 70 per cent are composed, for the most part, of holarctic elements of wide distribution and of comparatively recent specific origin. One genus, *Neoclytus*, is of neotropical origin. Three species are "dry belt" forms not, so far as known, recorded west of the park boundaries. Two species remain to be identified.

Only four species of Cerambycidae and one of Buprestidae listed here have not yet been recorded for Vancouver Island.

LITERATURE CITED

- Smith, Stace G. 1929, 1930. "Coleoptera" Museum and Art Notes (Vancouver, B.C.) 1929. 4 (2):73-74; 1930, 5 (1):24-25.
- Lindley, E. G. 1939. The Origin and Distribution of the Cerambycidae of North America, with special reference to the fauna of the Pacific slope. Proc. Sixth. Pac. Sci. Congress 1939.4:269-282.

THE HIBERNATION OF *NYMPHALIS CALIFORNICA* (Bdv.), THE CALIFORNIA TORTOISESHELL BUTTERFLY; A QUERY.—In the summer of 1945 (as noted by Hardy, Ent. Soc. B.C. Proc. 43:36) enormous numbers of this butterfly occurred throughout southern British Columbia. They do not breed on Vancouver Island but arrive here late in the summer and remain for the winter. On May 11th, 1946, while engaged in experimental spraying at Brentwood on the Saanich peninsula, I observed thousands of these butterflies passing overhead in a north-easterly direction. They travelled in small parties of ten or a dozen, always in the direction of the southern mainland. This return migration had been continuing for at least a week or ten days previous to my observing it and was so noticeable that it was the subject of correspondence in the local press. The point that occurs to me is that it is unusual for an insect to breed in one part of the province and hibernate in another. It would be interesting to know whether the habit of hibernating in the more salubrious climate of southern Vancouver Island rather than in the region where it breeds is the usual custom of this species or whether it occurs only in years of excessive abundance. In this connection the observations of entomologists on the mainland would help to clear up the point. Have hibernating specimens of this species been found on the mainland in the regions where *Ceanothus*, the food plant, occurs? —W. Downes, 2056 Granite Street, Victoria, B.C.

SPRING FLIGHT OF *NYMPHALIS CALIFORNICA* NEAR NELSON, B.C. (Lepidoptera: Nymphalidae).—While driving near Coffee Creek on the road between Nelson and Kaslo, B.C., April 14, 1947, I came upon a swarm of tortoiseshell butterflies. There were tens of thousands of them along the road and they seemed to be moving southward though I could not be sure of this. Every few yards there were groups of approximately 100 settled, and the air was full of them. They did not extend south beyond Queens Bay, though a few were noted across the lake, between Gray Creek and Creston. I am indebted to Dr. T. N. Freeman of Ottawa for identifying one of the butterflies as *N. CALIFORNICA* (Bdv.).—H. J. Coles, Golden, B.C.

ELM GALL APHID EATEN BY EVENING GROSBEEK (Aphididae: Eriosomatidae).—For about a week each year flocks of noisy evening Grosbeaks (*Hesperiphona vespertina*) invade the American elm trees lining some of Vernon's streets. This season (1947) they were busy by May 15, and the sidewalks were soon littered with bits of leaves. Examination showed that the birds were picking only the rolled leaf-galls filled with maturing *Eriosoma americana* (Riley), which they soon stripped out. The coxcomb galls of *E. crataegi* (Oest.), equally common on the trees, were not attacked in any of the cases observed. I am indebted to E. P. Venables for identification of the aphids.—Hugh B. Beech, Vernon, B.C.