by each larva. This practically disappears by the end of September because by then most of the old mined needles have fallen and the mines made by the young larvae in the new growth are too small to cause noticeable browning.

In intensified form the outbreak has been in progress for four years, 1942 and 1944 being the moth flight years. Thus far, the recovery of the trees has been satisfactory except on a small area near Lake Louise, where a few of the older trees appeared to be dying when examined in September, 1944. It is probable that older trees are less able to withstand the miner attack than young stands. In one mature stand on Brewster Creek, the needle miner attack appears to have complicated the bark beetle control work. The weakening of these trees seems to have attracted beetles from surrounding areas less affected by the miner. Consequently, it has been necessary to cruise and burn beetle-infested trees on the Brewster area on three successive years, while other areas required only two treatments.

At the present time it is impossible to predict what the final outcome of this infestation by the needle miner will be. If it should continue for another four years, mortality in mature stands probably would become severe. Fortunately, young reproduction occupies much of the affected area. A more serious consideration is the possibility of bark beetle attack on the mature trees weakened by the miner. As yet there is no indication of any material decrease in the needle-miner population. Several species of parasites have been recovered, but examination of over 12,000 needles showed parasitism to be less than 20%.

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POPULATION COUNTS OF POTATO FLEA BEETLES AT AGASSIZ AND CHILLIWACK, B.C. (Coleoptera: Chrysomelidae).—During the course of studies of the new tuber flea beetle, **Epitrix tuberis** Gentner in the lower Fraser valley, a remarkable diminution in numbers of the common western potato flea beetle, **Epitrix subcrinita** (LeConte) has been noted. Population counts of adults on potato foliage have been made each season since 1941 by means of sweeping, the beetles being then killed and counted in connection with our life history studies.

In 1941 75 per cent of those taken were **subcrinita.** In 1942 **subcrinita** out-numbered **tuberis** until June, after which the numbers were about equal. In 1943 the **subcrinita** collected in our sweepings were less than 10% of the total at any time throughout the season, and were usually so few that they were disregarded in our population estimates. In 1944 **subcrinta** was even scarcer and although it emerges from hibernation from two to three weeks earlier than **tuberis,** it was not collected in appreciable numbers even in May, before **tuberis** appears in any numbers, and throughout the season formed less than 1% of the beetle population at any time. These population counts were made both at Agassiz and Chilliwack, and the same conditions were found in both districts.

Although this reduction in numbers of **subcrinita** might be due to a natural cyclical phase, pressure of population by the great increase of **tuberis** in these years may be responsible, though it is difficult to see in what way one species could interfere with the other except during copulation. Parasitism is negligible in either species.—R. Glenndenning, Agassiz, B.C.

EROS THORACICUS IN BRITISH COLUMBIA (Coleoptera: Lycidae).—On July 6, 1934, I took a specimen of **E. thoracicus** (Rand) at Fernie, B.C., on herbage along the bank of the Elk River. W. J. Brown, who identified the specimen, advises me that G. S. Walley found a specimen at Likely, B.C., on July 7, 1938.—Hugh B. Leech.

THE WATER BEETLE AGABUS GRISEIPENNIS IN OREGON Coleoptera, Dytiscidae).—H. C. Fall in his revision of **Agabus** listed **A. griseipennis** LeConte as inhabiting the Rock Mountain and Plateau region. Localities were cited in Wyoming, Montana, New Mexico, Nevada and California (Owens Lake). C. W. Leng in his checklist of Coleoptera noted it from Nebraska and California. H. B. Leech (1942 Canad. Ent. 74(7):131, fig 11) added Utah: Far West; Skull Valley; Provo; California: Lone Pine, Inyo Co.; Bodie, Mono Co. At the same time he questioned the accuracy of the Montana determinations. I have two specimens (det. Leech) from Burns, Harney Co., Oregon, taken June 26, 1941, from a roadside ditch. This is a new record for the state and one I deem worthy of note.—Kenneth M. Fender, McMinnville, Ore.

APHODIUS ALTERNATUS IN BRITISH COLUMBIA (Coleoptera: Scarabaeidae).—On April 19, 1942, a specimen of the pretty, vittate **Aphodius alternatus** Horn (det. W. J. Brown) was found floating in a small pond on top of the Birney range, about a mile south of Vernon. Though dead, the beetle was fresh and in good condition; cattle were numerous in the vicinity, and several species of dung-inhabiting **Aphodius** were in flight at the time.—Hugh B. Leech.