

NOTES ON THE INSECT FAUNA OF HIGH ALTITUDES IN
CUSTER COUNTY, COLORADO.

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The faunæ of high altitudes always possess a peculiar interest by virtue of the light they throw on problems of geographical distribution, and especially the distribution in ancient times of what is now a strictly Arctic and Alpine fauna. For this reason, the following lists of species, fragmentary as they are, may be of some value as a contribution to our knowledge of the Alpine fauna of Colorado, and for comparison with Arctic and Alpine faunæ in general. The species here enumerated were taken in 1887, 1888 and 1889, on the eastern slope of the Sangre de Cristo Range, in Custer County, Colorado. Three gulches have been explored, namely, (1) Smith's Park Gulch, on a fork of Brush Creek, (2) Horseshoe Bend Gulch, the next gulch south of No. 1, and (3) Swift Creek Gulch. The great majority of insects came from Smith's Park Gulch. The altitudes are from 10,000 to 12,000 feet. A large number of insects were taken about the Micawber Mine, which is possibly not quite 10,000 feet; but it cannot be far from it, so the species are included. A list of the fauna and flora of the same part of Custer County, *below* 10,000 feet, is now in course of publication in the "West American Scientist." A comparison of the two lists will show that the fauna of higher altitudes differs very materially from that of the valley:—

COLEOPTERA.

These have been kindly identified by Dr. John Hamilton. They are classified according to locality and date of collection:—

- (1) Near Brush Creek, June 26 and 27, 1889—

Dolopius lateralis Esch.

Podabrus lateralis Lec.

Orsodacna atra var. *childreni* Kirby.

Cicindela longilabris Say.

Acmæops proteus Kirby.

Adoxus vitis L.

Dichelonychia backii Kirby.

O. childreni and *D. backii* were common. *A. vitis* had the thorax black, and elytra reddish-fulvous.