A Spur-throat Grasshopper

Melanoplus lemhiensis

Insecta — Orthoptera — Acrididae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Critically imperiled/Imperiled (G1G2)

Statewide: Critically imperiled (S1)

ESA: No status

USFS: Region 1: No status; Region 4: No status

BLM: No status IDFG: Not classified

BASIS FOR INCLUSION

Lack of essential information pertaining to status; Idaho endemic.

TAXONOMY

Hebard (1935) considered this species to be morphologically similar to *M. artemisiae* and *M. salmonis*. Hebard (1935) reported that both *M. idaho* and *M. lemhiensis* were collected on the same date and at the same location and that he did not recognize, in the field, that the observed male and female *M. idaho* individuals were different from *M. lemhiensis*. In later examination and description of both new species, *M. idaho* and *M. lemhiensis*, Hebard placed *M. idaho* in the *montanus* species group and *M. lemhiensis* in the *artemisiae* species group. Strohecker (1963) retained *M. lemhiensis* in the *artemisiae* species group.

DISTRIBUTION AND ABUNDANCE

This grasshopper is endemic to Idaho. The taxon is known from 1 locality in Lemhi County. No record of this species since its original collection during 1928 (Hebard 1935) is known.

POPULATION TREND

No data are available to suggest population trend. The species has not been recorded since 1928.

HABITAT AND ECOLOGY

Hebard (1935) reported that the series of specimens he collected were "secured on steep slopes of rock fragments thickly overgrown with sagebrush. The species was common only on the steepest upper slopes where there were many tufts of a fine, dry, yellow grass. The insect is a powerful though slow leaper ..., but instead of immediately jumping into another bush individuals usually leaped about in the open and were consequently much easier to capture. Limited time alone prevented assembling a large series and the spot would have been revisited had we realized that the insect would not be found anywhere else in the hills along the Salmon River." The elevation of the collection was about 1300 m. Hebard (1935) speculated that "north of that river [Salmon River] in this region *lemhiensis* is apparently supplanted by *artemisiae*."

ISSUES

Specific threats to this taxon are unknown. Threats to grasshoppers include pesticides and habitat modification. Although conversion of native habitat to agricultural uses has benefited some grasshopper species, there are no data to suggest that agriculture has benefited this species.

RECOMMENDED ACTIONS

The only known specimens were collected in 1928. Hebard's (1935) comment about the river being a dividing line between *M. lemhiensis* and *M. artemisiae* distributions indicates that he believed the distributions of these species could be wider than his collection data would indicate. Field surveys are needed to determine the current status of this population and to determine if additional populations occur in the region.

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