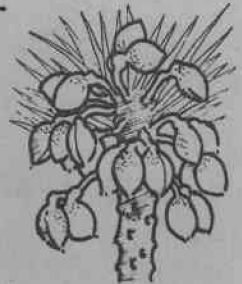


INSECT DISEASE REPORT



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EVALUATION OF FOREST INSECT CONDITIONS ON THE NATIONAL BISON RANGE MOIESE, MONTANA

by

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An evaluation of forest insect conditions on the National Bison Range at Moiese, Montana, was made on August 28, 1972.

Western spruce budworm, *Choristoneura occidentalis*, was found infesting Douglas-fir on the north slope of the upper west range. Most of the damage was confined to understory reproduction. If the infestation continues some top killing can be expected.

Patches of fall webworm, *Hyphantria cunea* (Dury), was found on chokecherry along the road below High Point. There was some evidence of previous damage by tent caterpillars, *Malacosoma* sp., which feed in the spring. Only the tops of chokecherry were killed. However, this might be beneficial because damaged chokecherry is sprouting and now producing browse that can be reached by game animals.

An infestation of pine butterfly, *Neophasia menapia* Feld., was noted on ponderosa pine in the southwest and lower south ranges. Light defoliation was detected by aerial surveys conducted in August (Fig. 1). Milton Haderlie observed numerous butterflies in the area during late summer.

An egg mass survey to predict the trend of the infestation was conducted on September 6. Two areas within the infestation were sampled for eggs by removing six 5-inch branch tips from each of 10 trees. The branches were then examined at the laboratory for viable eggs. An average of 20.16 eggs were recorded per 5-inch branch tip for the lower south range and 12.65 eggs in the southwest range.

From this data we predict that the pine butterfly infestation will continue on the Bison Range at or above the 1972 level in 1973.



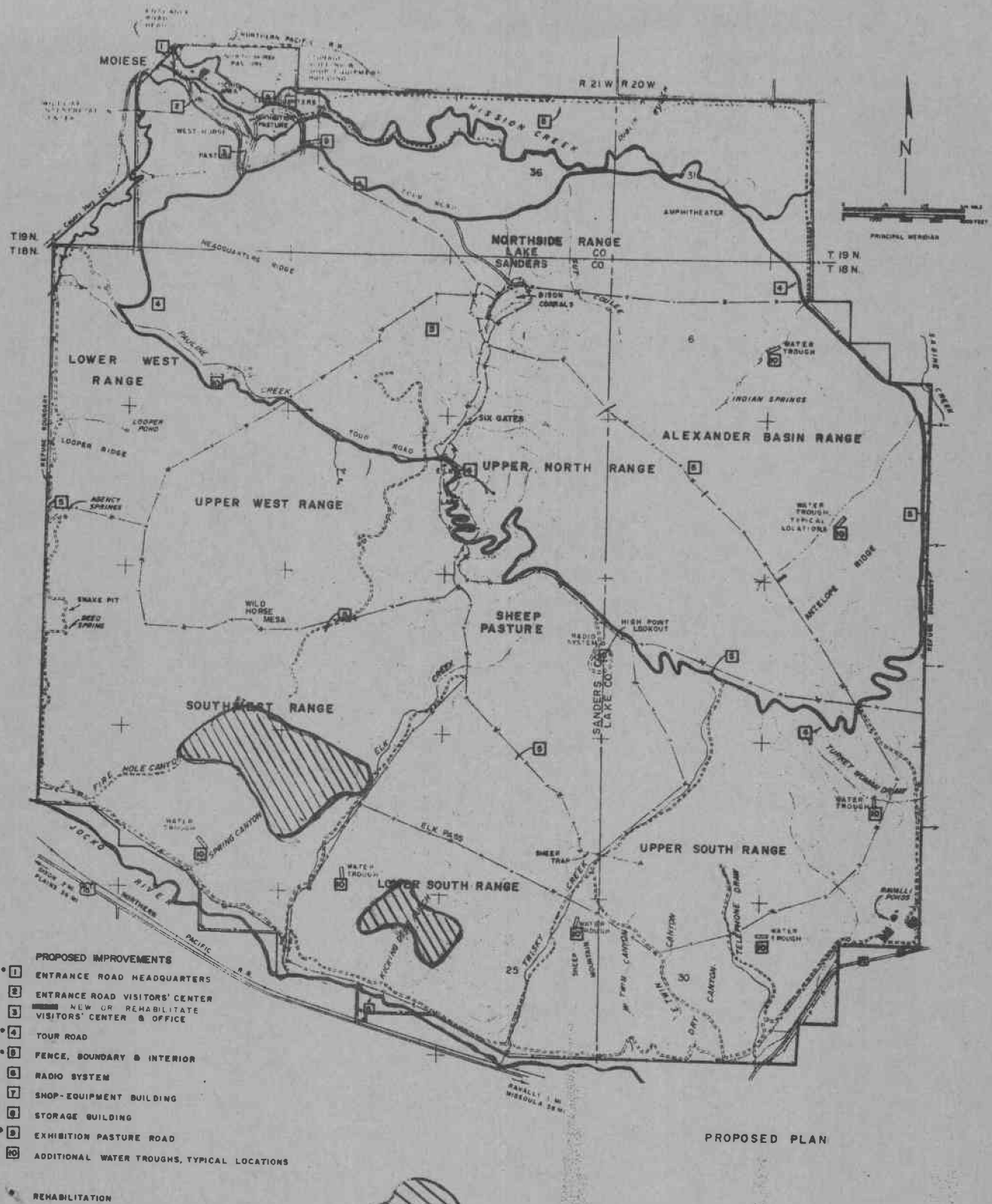


Figure 1 -- Area of visible defoliation caused by pine butterfly