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Results of releases of *Oberea erythrocephala* against leafy spurge in Wyoming

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The stem-root boring beetle, *Oberea erythrocephala*, imported from Italy, has been released at five (5) different sites in Wyoming during the period 1980-1982. Two locations were in the northeast (Crook County), two in central Wyoming (Fremont County) and one in the southwest (Lincoln County). Unfortunately because of overzealous ranchers and/or weed & pest district personnel, the spurge at three (3) of the five (5) sites were treated with herbicides within one to two years following the release (Table 1). At the 4th site, in Lincoln County, the original site was sprayed in the spring following the release with the exception of a small center plot in which the release had been made. The 5th site and the oldest (Fremont County) has not been sprayed.

Prior to the spraying, all plots were examined periodically for presence of beetles or evidence of oviposition and/or stem boring. No adults have been observed at any of the sites in any year following the release. With the exception of the two sites in central Wyoming, neither larvae nor evidence of stem boring was encountered. Both larvae and stem tunneling were found the year of release and the following year in plots in Fremont County suggesting a two (2) year life cycle under Wyoming conditions. In the subsequent two years nothing has been found during non-destructive sampling. At Devil's Tower (Crook Co.) adults caged on plants in 1980 died within 3 days suggesting that they were unable to survive on that "variety" of spurge. Consequently, there is little hope that the species of beetle has established itself in Wyoming.

Table 1. Fate of Oberea erythrocephala release sites in Wyoming 1980-1984.

County	Site	Date of release	Condition
Crook	Devils Tower	VII-23-80	sprayed, fall 1982
Crook	Devils Tower	VI-2-81	sprayed, fall 1982
Fremont	Lander	VII-13-81	sprayed, fall 1983
Fremont	Sinks Canyon	VII-24-80	extant
Lincoln	Rte. 126	VII-4-82	sprayed, spring 1983
Sheridan	Clear Creek	VI-2-81	sprayed, July 1983