Army Cutworm Population Monitoring

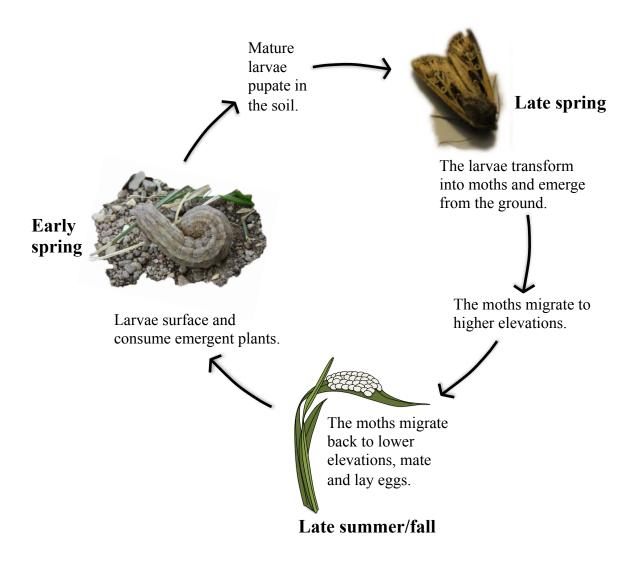
Lauren Shreading

Last spring, army cutworms caused extensive damage to seeded plants. The larvae moved across fall planting areas and experimental sites, consuming available emergent foliage.

Large army cutworm populations could threaten the survival of future plantings. We will participate in a statewide monitoring effort to estimate cutworm abundance and population growth patterns. Kevin Wanner at Montana State University is leading this effort. Monitoring the number of returning adults will help us assess the risk of another damaging population spike next spring.

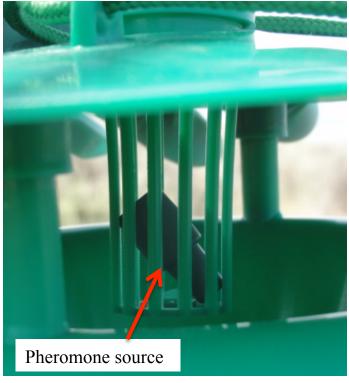


Army cutworm life cycle



Army cutworm moths migrate to higher elevations in late spring (Pruess 1967). Grizzly bears consume moth masses during this time (White et. al 1998). In late summer and fall army cutworm moths migrate back to lower elevation sites like MPG Ranch to mate and lay eggs (Blodgett et. al 2000). We will use pheromone-baited traps to capture moths on their return to lower elevations.





We use species-specific pheromone traps to attract two cutworm moth species: army and pale western cutworm moths. We found no evidence of pale western cutworm damage this year, but large populations of this species can cause damage similar to army cutworms. Weekly monitoring of traps began on August 6, 2014. So far, we have trapped eleven army and five pale western cutworm moths. We expect capture numbers to increase as fall approaches and temperatures drop.

Literature cited

- Blodgett S., Johnson G., Lanier W., Wago J. 2000. Pale western and army cutworms in Montana. http://www.mtagalert.org/alertDocs/MontGuide%20-%20Cutworms.pdf
- Pruess, K.P. 1967. Migration of the Army Cutworm, *Chorizagrotis auxiliaries* (Lepidoptera: Noctuidae). I. evidence for migration. Ann. Entomol. Soc. Am. 60, 910.
- White D., Jr., Kenall, K.C., Picton, H.D. 1998. Grizzly bear feeding activity at alpine army cutworm moth aggregation sites in northwest Montana. Canadian Journal of Zoology 76, 221.