

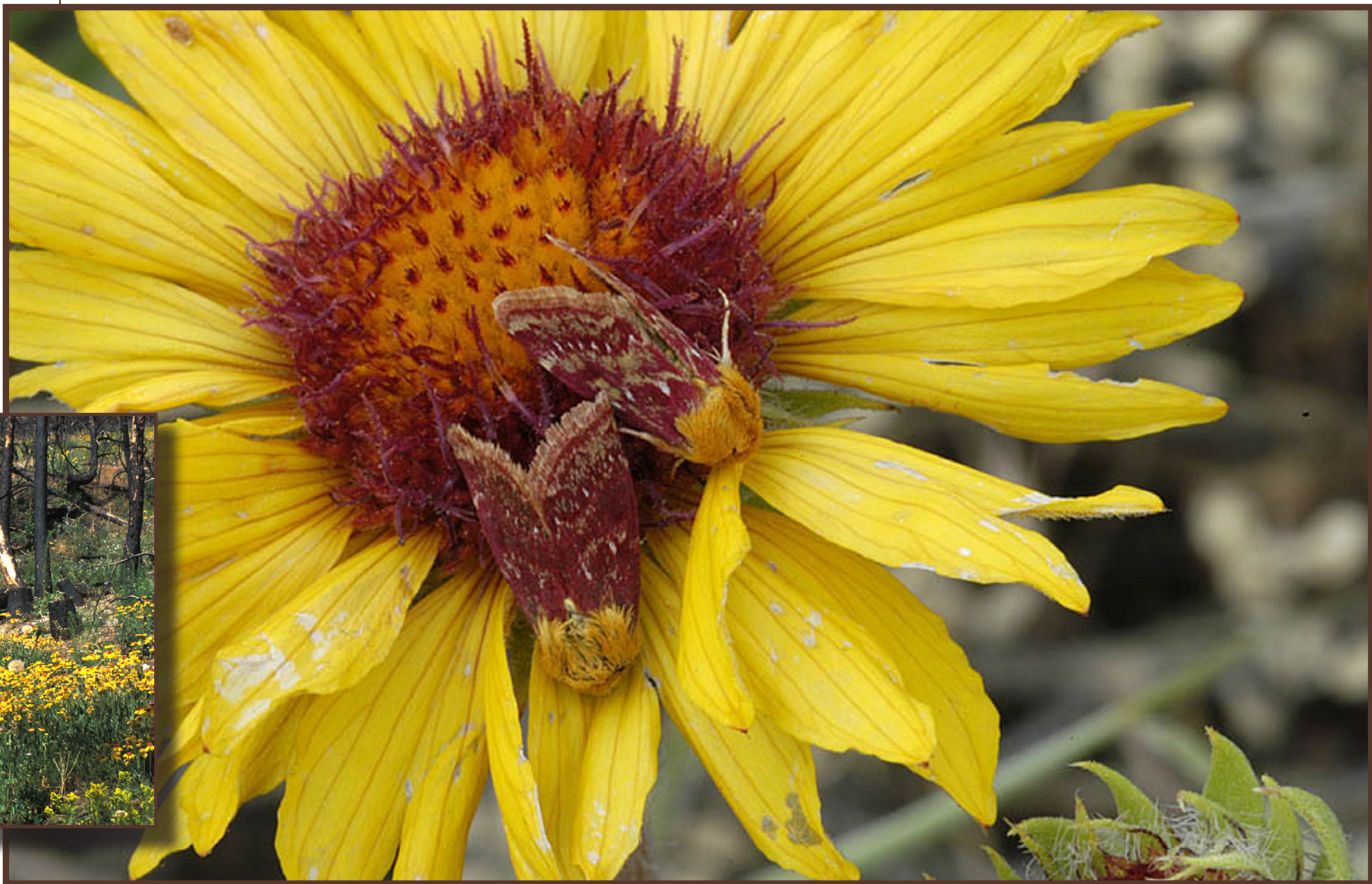
A Beautiful Relationship

BOTANY AND ENTOMOLOGY

Evolution is pushed and pulled by many ecological forces including predation and reproductive success. Insects and flowering plants have been competing and cooperating for ages, a relationship that Darwin and others have recognized as important factors in shaping species. Darwin developed this idea and found many striking examples between plants and insects. **The Schinia flowermoth (*Schinia masoni*)** is completely dependent on **Blanketflower (*Gaillardia aristata*)** as its sole host plant. The *Schinia* lays its eggs only on Blanketflower allowing its larvae to feed on the plant's seeds. To help avoid being eaten, the adult moth has developed coloring very similar to the blossoms of the plant. This relationship is the result of a long process of coevolution.

A Rare Colorado Moth

Most flowermoths are found throughout the range of their host plant. The **Blanketflower** grows across North America but the ***Schinia* flowermoth** is found only in a small area along the Front Range primarily in northern Colorado. It is not unusual to find only a handful of these moths in thousands of blossoms of Blanketflower. These three specimens are part of fewer than 100 that exist in museum collections.



Photos by Chuck Harp

The Colorado Firemoth

Blanketflower increases dramatically in areas where there has been fire, usually flowering within one year after an area has burned. The ***Schinia*** follows the Blanketflower into these areas. Over time both populations decrease and become uncommon in places that have not burned for decades. The presence of these species help researchers understand how fire influences the ecology of a region.



Photo by Bruce E. Byers