

Managing Needs of Butterflies

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- Life cycles
- Seasonal changes
- Microclimate requirements
- Threats
- Solutions



Western Tailed Blue

Complex Life Cycle Requiring:



- 1. Food (host) plants**
- 2. Energy providing plants (nectar)**

**Rocky Mountain Dotted Blues are specific.
They must have sulfur flowers.**

- **Butterfly lays eggs on Host plant**
- **Caterpillar eats and grows on Host**



Mourning Cloak eats willow, cottonwood, birches, and hackberries,elm



Black Swallowtail eats parsley family (cultivated, weedy, natives)

Caterpillar forms chrysalis

Adult Butterfly emerges, mates, lays eggs

Mourning Cloak



Nectar in flowers, minerals in puddles



Woodland Skipper



Ottoe Skipper

Some butterflies are very specific in their host plant needs

Hoary Elfin lives only on Kinnikinnick



Fritillary caterpillars live only on Violets

- **Edward's Fritillary goes to the Violet to lay eggs,
but nectars on many flowers.**



Rare Hops Azure (Blue) lives only on Wild Hops



**Parnassian caterpillar lives only on
Stonecrop(*Sedum*);
Adult nectars on many flowers**

**Persius Duskywing lives
only on Golden Banner**



Butterflies are seasonal

- Adults fly right after the snows melt



Spring White



Moss' Elfin

Swallowtails fly in summer

**Pale and
Indra Swallowtails**



**Tiger and
Anise Swallowtails**



American Lady flies as late as October



Microclimates

- **Moisture for host plant growth**
 - Riparian is excellent
- **Sunlight for wing muscle energy**
- **Rich, diverse vegetation**
- **Undisturbed refuge for eggs and chrysalids**

Challenges

- **Trails that subdivide the habitat**
- **Dogs –alter vegetation**
- **Bikes encourage erosion**
- **Trampling - accentuates humidity extremes**
- **Prescribed burns**
- **Controlled grazing**
- **Pesticides**

Solutions

- **Trail placement near borders**
- **Trails away from riparian areas**
- **Dogs allowed restricted areas on leash**
- **Bikes on gravel trails, least erosion**
- **Plan for trampled areas – picnic tables, parking, outhouses**

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Butterfly Research Team