

Red-band hairstreak

By Tom Allen

olks that live in the Mountain State know, and visitors quickly learn, that West Virginia is beautiful and rich in wildlife species. Butterflies are one of our most visible forms of wildlife. They can be seen from the earliest days of spring to the latest, chilly days of fall. At times on warm, sunny days in late winter mourning cloaks, belonging to a hardy group of butterflies that hibernate during winter, can be coaxed out of their resting places by the sun's heat. They flit around among patches of snow, landing long enough to sip moisture from the soil before retreating again to their hiding place in late afternoon. Those of us who are lucky enough to see a mourning cloak on such a day are reminded that winter can't last forever.

West Virginia butterflies spend

their winters in various stages of development. That is why we see certain species in early spring, others species a little later, and some species not until summer. If we are watchful during the onset of warm weather, we will begin to notice groups of tiger swallowtails, spicebush swallowtails, and perhaps

pipevine or zebra swallowtails gathering at puddles along trails, stream banks or woodland roads to sip moisture and nutrients from the soil. If we look closely we may even see the tiny spring azure blues perched among them, sometimes by the hundreds. The scene may resemble a smorgasbord of species composed of various swallowtails, blues, whites and even a few dark-colored duskywing skippers.

If we are in an areas where redbud and flowering dogwoods

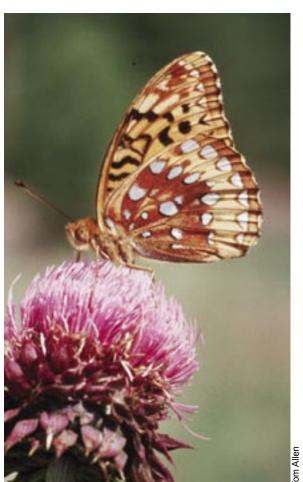
are blooming we should be looking for the small brown and greenish Henry's elfin perched among the blues. All of these species spent the winter months in the chrysalis or pupal stage, and are trig-



Henry's elfin

gered into development by a few warm, sunny days in early spring. Like so many of these small hairstreaks, blues and elfins that feed on the flower buds or young fruits of the host in order to obtain the necessary nutrients for development, Henry's elfin requires a specific host plant. In the case of Henry's elfin, it feeds mainly on the flowers of the redbud tree, completing its development and pupating by the time the flowers are gone. Then it must live on its stored nutrients as a pupa until the following spring when the redbuds bloom again. To witness this species you must be out amongst the redbuds while they are in bloom.

The earliest of the spring azures has a similar life cycle, except that they feed on the flowers of the dogwood, and like the elfin must be observed during that period when



Great spangled frittilary



Horace's duskywing

the trees are in flower.

Several early spring flowers, many of them wildflowers, attract spring butterflies, but perhaps one of the best is the phlox. Not only are phloxes colorful, but they are

> nectar-rich and provide the nutrients needed by the early spring butterflies. Various mustards, including peppergrass and cresses which also bloom in early spring, serve as host plants as well as a nectar source. Woodland butterflies, such as the colorful falcate orangetip, Olympia marble and the duskywing skippers can be seen along woodland trails only during spring.

Other butterflies spend the winter as caterpillars in various stages of growth tucked away in protected locations, usually in a silken shelter that they create the previous fall. These caterpillars must either complete their feeding during spring or simply pupate. Whichever they do can delay their appearance for up to several weeks. Some of these species include the checkerspots, fritillaries and several skippers. Even for these species many will only appear as butterflies once during the year. The checkerspots (Baltimore and Harris') spend their winter as halfgrown caterpillars in a tightly woven shelter on the host plant in a large group. When the weather warms in spring they disperse from the shelter feeding on their own to complete their development.

Fritillaries, on the other hand, winter as newly hatched caterpillars on or near the host violet plant. They must begin feeding and develop through the caterpillar stage before they are ready to become butterflies. For them, their arrival date as butterflies will not be until June or July, but they will stay around most of the summer feeding at various plants and laying their eggs for the next season. The smallest fritillaries may live only a week as an adult, while the larger butterflies may live several weeks or months. Males usually wear out first and die while the female lives longer to lay their eggs.

Approximately 129 species of butterflies have been found in West Virginia, some of which are very

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These Spring azures are "puddling," an activity done by males in which they gather moisture and minerals from damp sand, mud puddles or stream banks.





The resemblance between the Baltimore caterpillar (top) and the Baltimore butterfly is very noticeable.

rare and difficult to locate because of their specialized habitat or host plant requirements. Others migrate into the state either from northern ranges or from the South when conditions allow their populations to expand. Some of these, especially southern skippers, such as the clouded, satchem and the fiery skippers, may not appear until late summer or even fall. Others, like the American lady, may be seen in early spring returning northward with the onset of spring weather. Monarchs generally return to West

Virginia in May and June, repopulating open fields and meadows where milkweeds abound.

With West Virginia's great diversity of habitat and flora, from mountain tops at nearly 4,000 feet in elevation to river valleys along

the Ohio and Potomac rivers, it is no doubt that the mountain state is considered the butterfly capital of the northeast. So get out and enjoy the beauty.

Tom Allen is a retired WRS wildlife biologist now working in Florida.

Pointers For Butterfly Gardens

- 1. Plant flora that butterflies are drawn to, such as:
- Nectar-bearing, compound flowers such as those in the daisy family zinnias, marigolds and asters. Old varieties, more like the wild original species, usually provide more nectar than highly hybridized and/or double flowers.
 - Butterfly weed: Asclepis tuberosa.
 - Spring blooms such as lilacs, azaleas and golden alyssum (Aurelia).
 - Late bloom such as goldenrods, michaelmas daisies, gaillardia and blazing stars, (*Liatris*).
 - Herbs, especially hyssop, the sages and catnip.
 - A wide variety of flower colors, but favorites may be orange, pink, lavender, purple, yellow and white.
- **2.** If possible, place your flowers where they receive full sun for most of the day.
 - **3.** If you raise vegetables, plant some butterfly flowers among the vegetables. The blooms add color and some of the flowers act as companion plants to vegetables, warding off some insects that might otherwise require pesticide treatment. Some visiting butterflies are excellent garden-crop pollinators.
 - 4. To satisfy butterflies' entire life cycle needs, you might try to provide for them in their caterpillar phase: red clover or alfalfa for sulphur butterflies; parsley, dill, loveage or fennel for the black swallowtail group; milkweeds for monarchs and queens.
- **5.** To avoid a severe setback in your butterfly gardening efforts, use chemical and biological pest controls sparingly, if at all.
- **6.** For optimum butterfly attendance, provide perpetual butterfly bloom from late March through early frosts.

Information from **The Backyard Naturalist** by Craig Tufts, National Wildlife Federation. For additional information or books available, check out our website, **www.wvdnr.gov** or call 304-637-0245 for a brochure.