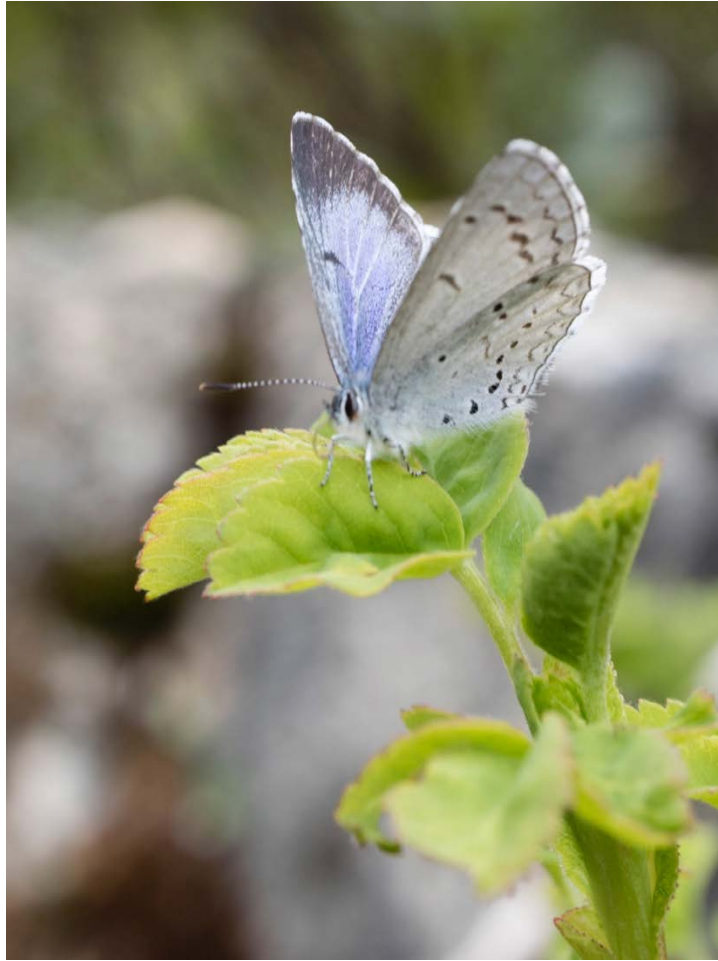


# THE GREAT OUTDOORS



*Spring azure butterfly, possibly looking for a place to lay an egg. Photo: Checkermallow, Flickr.*

## **Welcome, Spring**

*Sunny days offer good prospects of spotting early butterflies, including the spring azure.*

By J. Morton Galetto

What a first weekend in March we had! People in the neighborhood was out in tee shirts; it was 63 degrees and it felt like 80

degrees in the sun. The sky was as blue as a Covid pandemic day. I hope we'll never read that sentence again – not poetic but true. A sheep shearling jacket was shed and dropped and dropped in the road by someone – who hopefully would be back looking for it later. Late winter was offering a spring day and my enthusiasm was shared by many. I'm often surprised by how few people are outside in my neighborhood, but not on this day; entire families were strolling our quiet streets.

It was perfect weather for the earliest of butterflies. The Mourning Cloak winters over as an adult in the crevices of tree bark and leaf litter and is one of the first to emerge. Its dark body and creamy borders are like a mirage flying down a woodland path. We have discussed this beauty in a past article.

By contrast our subject butterfly, the spring azure, whose approach to emergence is from a chrysalis, has not overwintered. Temperatures and conditions have to be just right for it to appear: generally 55-59 degrees. I didn't get lucky and see any this past weekend, but I am optimistic.

Let's take a moment to review the life cycle of butterflies and moths. All will start as an egg, and then after the egg hatches the insect moves to its larval stage, a caterpillar.

The larva becomes a pupa which will transition to an adult butterfly or moth – in other words it will undergo metamorphosis. This larval conversion takes place in a chrysalis for butterflies or a cocoon for moths.

When they emerge in late winter or early spring, nectar is scarce. Spring azures get their nourishment from mineral sources, like mud puddles, rock surfaces, leaf litter, and even bird droppings.



*Puddling: Note the upper wing is displayed on the righthand butterfly. The closed-wing azure on the left is hard to distinguish from the background. Photo: Jim iNaturalist, Maryland Biodiversity Website.*

Once they have emerged their priority is mating, which begins the whole circle of life again - the assurance of future generations. It is not unusual to see two azures flitting, about a foot off the ground, in courtship. These small butterflies live as adults for only a few days or weeks, so breeding is that much more urgent. Their underwing is camouflaged against leaf litter and when their wings are open you get a flash of blue, in a "Now you see me, now you don't" display of color. I often have trouble following these winged dancers.



*The spring azure is a thumbnail-sized butterfly. Photo: Rborchelt iNaturalist, Maryland Biodiversity Website.*

After mating the female must find a “host plant” to lay her eggs so the larva has a food source. Some butterflies lay clusters of eggs, while others like azures lay single ones.

Woody plants are their preference – dogwoods, viburnum, cherry, cherry flowers, and heaths such as blueberries and Labrador tea. Remember that each plant-eating insect has evolved with specific species of plants that it can tolerate or rely on as a food source. That’s one reason why native floras are so important.

The caterpillars are little eating machines, nibbling on newly developing leaves and buds. Most will also feed numerous other insects, birds and spiders. It takes thousands of caterpillars to satisfy a clutch of hungry chicks; the caterpillars are tiny and would make a great snack for an ant. However, to guard against being devoured by ants azures produce a honeydew that ants relish, so the ant palpates them for the liquid and in turn protects them (Mary Anne Broge).

Lepidopterist David Wagner relays that prior to studying collections of butterflies, the spring azure (*Celastrina ladon* complex) was thought to “represent a single species [but it] is now thought to be a complex of six or more biologically distinct entities.” He further suggests that much distributional information must now be reexamined or possibly

discarded. I suspect a non-scientist like me hasn't a prayer of making such distinctions, although time of year may narrow down the species somewhat.

In "How to Spot Butterflies" the Suttons simplified this exploration to some extent, relaying that on a spring walk they observed perhaps eight of these "thumbnail-sized" fliers over a mile's time, including "a few of the forms, *lucia* and *marginata*. The confused species concept of this group was forgotten as we watched the frenzied chases, the blue uppersides glistening in the warm sun."

They were essentially suggesting that it is okay to simply enjoy the show, maybe not for cataloging experts but for most of us. We can bask in the sun just as they do.

Later the Suttons go on to explain that the spring azure has been split into a number of species. In 1999 the taxonomy was yet to be fleshed out, yet we know the summer azure was once believed to be a second flight of spring azure, but is now known to be a distinctly different species.



*The azure is a lovely creature. PHOTO: Walter Siegmund.*

As a local naturalist Pat Sutton has been heard by many people to say with gusto, "Butterflies are solar powered," since a sunny day, or even a cloudy day which clears, offers good viewing prospects. We have had a number of days reach temperatures in the high 50°s so it's time to keep your eyes peeled for the early arrivals.

### **Sources**

How to Spot Butterflies, Patricia and Clay Sutton.

Caterpillars of Eastern North America, David L. Wagner.

The amazing Mary Anne Broge is the instructor at Bowman's Hill Wildflower Preserve, Pennsylvania Master Naturalist, and Editor of Butterfly Gardener. Look her up on The Natural Web, Exploring Nature's Connections.