

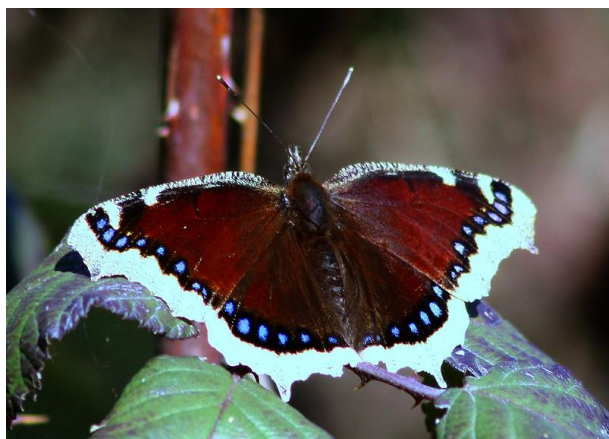
Meet the Pollinators

The Mourning Cloak: Assumption Buster

By Jill Eisenstein, Master Gardener Volunteer

What might a warm winter day and a warm summer day have in common besides sun? Butterflies.

When it comes to butterflies, assumptions abound. Here's one: butterflies either migrate or die off in the winter. Another one: butterflies need flowers to live. Or: adult butterflies only live a few days or weeks. But let me introduce to you a stunning outlier, a butterfly that startles us when snow is still on the ground -- the Mourning cloak (*Nymphalis antiopa*).



Mourning Cloak David Hofman Flickr CC

The large – sometimes four inches across – dark, red/brown velvety wings have yellowish-white edges trimmed with striking blue dots. Apparently, they resemble the capes mourners wore in medieval times, and so the name. Mourning cloaks overwinter as – wait for it -- ADULTS in rock crevices, under tree bark, or in wood piles. Sometimes they snuggle under leaves or in stucco buildings.

To get through the coldest parts of winter, these butterflies enter a state of suspended animation called diapause, but before that, they go through a most amazing transformation. In fall, the butterfly just stops eating and purges its body of any food or substances that might freeze and cause damage. Then it produces an anti-freezing agent called Glycerol which keeps ice-crystals from forming in its body, climbs into its overwintering spot, and goes into diapause. Similar to true hibernation in higher animals, for all the world, the insect appears dead.

When mourning cloaks emerge, there are no flowers blooming, so instead of nectar, they feed mostly on tree sap, especially from oaks. But they might also get their salt and amino acid nutrients from fresh animal dung or decaying matter such as rotting fruit.

In spring, males hang out in sunny places, waiting for the females. Once mating has taken place, the females each lay about a hundred eggs in circular clusters on the twigs of host plants, often willows, but sometimes birches, cottonwoods, elms or hackberries. Then that generation dies off. When the larvae –known as spiny elm caterpillars -- hatch, they feed, often in groups, on the

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foliage of these trees until they pupate. Don't be alarmed if you see them; the host trees will be just fine.

The second generation of Mourning cloaks can be spotted in June or July, and those are the ones that will overwinter and become the breeders about ten months later, making them one of our longest-lived butterflies.

They are also one of the most widespread butterfly species. Mourning cloaks range across much of the northern hemisphere including North America, Europe, and Asia. They are, however, rare in Great Britain, where the species is referred to as Camberwell beauty.

Butterflies, including the Mourning cloak, are accidental pollinators, but their grace and beauty make them stars; people were planting "butterfly gardens" long before "pollinator gardens"! If you would like to invite Mourning cloaks to your garden, they aren't fussy. They like the typical pollinator plants like Black-eyed susans (*Rudbeckia hirta*), Blazing star (*Liatris spp.*), Ironweed (*Veronia baldwinii*), New England aster (*Aster novae-angliae*), Vervain (*Verbena spp.*), Yarrow (*Achillea millefolium*), Butterfly weed (*Asclepias tuberosa*), and more. They will also readily feed on bananas placed in a tray feeder. Just remember, they will need feeding into the fall to get ready for their winter 'pause.

Taking Shelter

Other overwintering adult butterflies include Question marks (*Polygonia interrogationis*), Eastern commas (*Polygonia comma*) and Compton tortoiseshells (*Nymphalis vaualbum*). All are in the family Nymphalidae, the brush-footed butterflies. The front legs of these butterflies are small, so they appear to have just four legs, and walk using only their middle and hind legs. The short, hairy front legs look like little brushes and can be used for smelling or tasting.

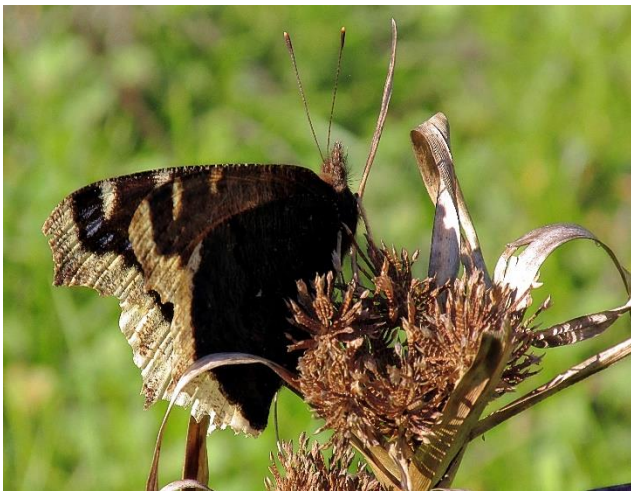


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