

SEPTEMBER 1-14, 2014 NATURAL HISTORY NOTES FOR EASTVIEW
By Dick Harlow

Seasonally, September is considered the first month of Fall and December is considered the first month of Winter. With cooler weather, migrating birds are moving and have been moving since August. Day length is shortening, so short-day flowers are in bloom. Much of nature is beginning to prepare itself for the advent of winter, cold temperatures frozen ground, and long days without sunlight. So, food storage, "scoping out" hunting areas, finding secure dwellings and the best security from natural enemies is the order of this season for the wildlife community.

Yes, birds have finished their molt and are migrating south! We will see our winter residents of Goldfinch, House Finch, Titmouse and Woodpeckers as they become more dependent on our bird feeders.



Eastern Tailed Blue, *Everes comyntas* Picking up minerals from soil

Photo © Dick Harlow

Something can be said for beauty in small packages; this butterfly is just larger than a nickel! I was edging our garden and this fellow decided he wanted to investigate the overturned soil. He must have been looking for soil minerals that were available. Although this species loves clovers and vetch and is found in field and meadow habitats such as East View, it could easily be missed because of its size, and cryptic coloration among the clovers and grasses. This little butterfly is truly ubiquitous.

As mentioned in the East View field notes at the end of August, there are fields of goldenrod right here. Looking out from Deer Meadow Drive and South Street you can see the beautiful yellows of Goldenrod in areas that are not mowed. Most of the goldenrod is Rough-stemmed Goldenrod and Lance-leaved Goldenrod, but there are many species that could be in the mix. However, from a distance the color could be

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somewhat muted unless massed in many plants at full bloom. When you see them up close the flowerets are quite nice looking.



Field of Goldenrod opposite Deer Meadow Drive cottages facing south.

Photo © Dick Harlow

However, by the time you read this column, the pictures above and below show the flowers in their prime, but sad to say by the middle of September many goldenrod flowers have passed giving way to the dark purple blue of the Wild New England Aster.



Giant Goldenrod, *Solidago gigantea* mass of flowerets

Photo © Dick Harlow

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Giant Goldenrod, *Solidago gigantea* is an unusual plant in that it is the tallest of the goldenrods reaching 7-8 feet. Found in every state of the 48 states except Arizona and in all the provinces of Canada except the Yukon, it is a very hardy plant.



Giant Goldenrod 7' tall, *Solidago gigantea* Color muted from a distance.

Photo © Dick Harlow

Immigrants from Europe brought their favorite plants here, so travelers back to the old country have brought plants from North America to Europe. Goldenrod species from North America were introduced to Europe and due to a lack of competition is now considered an invasive.

Besides the beautiful array of yellow flowerets that make up a stem of goldenrods, there are many interesting microcosms that occur within the goldenrod community, one of which develops around the stem of the goldenrod producing a large oval projection in the middle of the stem.



Giant Goldenrod stem and gall, *Solidago gigantea* Gall caused by the goldenrod gallfly *Eurosta solidaginis*

Photo © Dick Harlow

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This is called a goldenrod ball gall caused by the goldenrod gallfly. In late spring a female fly about 1/3 of an inch long, lays an egg on the stem of a growing goldenrod using her ovipositor, a pointed tube at the end of her abdomen. Research has shown that in 10 days the egg hatches and



Goldenrod gall fly *Eurosta solidaginis*

Photo © Bug Guide

the larva burrows into the stem of the goldenrod. During the summer the larva feed on the inside of the stem as the stem develops protective tissue around the larva. In doing so the stem is trying to protect itself from the feeding behavior of the larva, thus developing tissue in a ball around this larva and within the stem. Consequently, the middle of the stem has an enlarged section that is in the shape of a ball. By fall the gall has grown to about an inch in diameter and the larva now will spend the winter inside the gall ready to escape come spring. It can survive the winter by producing glycerol, which keeps the body of the larva from freezing, a type of insect antifreeze. Of course insects go from egg to larva, to pupa to adult during their life cycle. Once the warm weather of spring arrives, the larva metamorphoses into a pupa and two weeks later the adult fly emerges from the gall to continue the cycle. Even if the goldenrod stalk is cut down and thrown away, this doesn't prevent the life cycle from completion, only fire would kill the cycle from completing larva to fly.

We have an herb in our field between Deer Meadow Drive and Kestrel Lane, is it either a cooking herb, wildflower or a weed?

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Vervain, Verbena hastata growing on EastView property.

Photo © Dick Harlow

Blue vervain, Verbena hastata is an interesting native plant of our meadows, fields, wetlands and shores. There are two wild varieties of vervain and these varieties can be used as a habitat indicator. The white flowered variety Verbena urticifolia likes dryer conditions, but sometimes can be found in a mix of dry and damp conditions. The blue variety likes damp but well drained soil. Generally, the white variety for dryer conditions and blue for wet or damp conditions.

Vervain is considered an herb as the edible parts of the plant are the flowers and the leaves are used primarily in tea.

Vervain flowers bloom from June to September, so it is a good plant to have in the garden. It is considered a fine plant for pollinators such as butterflies and bees. And, birds like the seeds as well.

Let's not forget Queen Anne's lace, Daucus carota, a member of the carrot family that is flowering throughout our meadow and field from August through the beginning of September.

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Queen Anne's lace, *Daucus carota* growing in our fields and meadows.

Photo © Dick Harlow

Although butterflies and dragonflies will be waning this month, the first two weeks of the month should show a flurry of activity. On the first, with the warm sun and light breezes, Monarchs, Giant Swallowtails, Clouded Sulphurs, Viceroy's and Eastern Tailed Blues were some of the butterflies that were out in force. We still have Cabbage Whites and others flying about. However, when the colder weather arrives there will be a marked decrease in insect and bird activity.

Since I'm trying to tabulate how many Monarchs use our campus, please let me know when you see one.

Butterfly List

- Monarch 8/14
- Viceroy 5/14
- Giant Swallowtail 3/14
- Black Swallowtail 1/14
- Clouded Sulphur 10/14
- Orange Sulphur 1/14

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- Cabbage White 4/14
- Eastern Tailed Blue 1/14
- Pearl Crescent 1/14

of sightings per 14 days

Dragonfly List

- Canada Darner
- Yellow-legged Meadowhawk
- White-faced Meadowhawk

Damselflies

- Eastern Forktail
- Marsh Bluet

Mammal List

- Eastern Cottontail