Butterflies of Finger Lakes National Forest An Introduction for Beginners

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Giant Swallowtail, a butterfly of forests and forest edges, whose larvae feed on Prickly Ash.

New York State is home to at least 160 different kinds of butterflies. Since 1990, more than 60 of those species have been found on Finger Lakes National Forest (FLNF), which is 16,259 acres in size (as of June 2015) and located in the Finger Lakes Region of central New York. FLNF is the only national forest in New York State. In this introductory pamphlet, only a dozen of the more colorful or common butterflies from FLNF are illustrated, with general information about when and where to find them. A complete list of butterflies can be found on the FLNF web site: http://www.fs.usda.gov/gmfl.

Where to Find Butterflies: Butterflies can be found anywhere on FLNF, but some places are better than others. Most of our butterflies prefer fields and forest edges, with plenty of sunlight and flowering plants to provide nectar for food. Some kinds of butterflies have caterpillars (larvae) that specialize in feeding on only one kind of plant or group of plants. For example, caterpillars of the West Virginia White, an early Spring butterfly, feed only on toothworts, so your chances of finding the butterfly are better if you find its larval food plant first. Its close relative, the Cabbage White (unintentionally introduced to North America from Europe

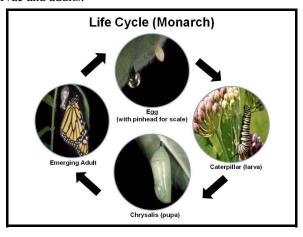
in the 1860s), on the other hand, has larvae that feed on a wide variety of plants in the mustard family (Brassicaceae). As adults, most butterflies sip nectar from a variety of flowering plants, but some species, like Mourning Cloak, Eastern Comma, and Question Mark, prefer tree sap or the liquids associated with animal dung.

It also is common to find groups of butterflies gathered around mud holes or along the edges of wet, seepage areas, sipping moisture (a behavior called "puddling"). Scientific studies have shown that the butterflies assembled at "puddle parties" mostly are males and that the minerals obtained while puddling are essential for successful reproduction. Sometimes, the accumulated urine and manure found around horse stables can be attractive, so it pays to visit areas where horses have been recently, along trails or at trailheads. The Backbone Horse Camp on FLNF can be a good place for butterflies on a hot, sunny day, along with the edges of pasture ponds.

Seasonality: Some butterflies over-winter (hibernate) as adults and emerge in early spring. Over-wintering butterflies found on FLNF include Mourning Cloak, Eastern Comma, and Question Mark, among others. Other butterflies hatch only one brood a year (called a "flight"), while others will hatch multiple broods. On FLNF, Eastern Pine Elfin and West Virginia White both are early Spring butterflies that have only one brood, while the widespread Cabbage White will hatch multiple broods each Summer. Many adult butterflies live for only a few weeks, during which they mate, lay eggs, and die. On FLNF, butterflies can usually be seen from late April through mid-October, depending upon whether or not Spring is early and Fall, with its first killing frost, arrives later than usual. In general, butterflies prefer sunny, warm days, with temperatures above 70° F.

Life Cycle: Butterflies hatch from tiny eggs, often smaller than the head of a pin, into a larval stage, called a caterpillar. Caterpillars may have very specific host plants upon which they feed until they reach a point where they stop eating and transform (metamorphose) into a resting pupal stage, called a chrysalis, from which the adult eventually emerges. The entire life cycle may take only a few weeks. In some species, caterpillars incorporate distasteful chemicals from plants into their bodies and transfer those chemicals to the adult butterfly, making both the caterpillar and adult distasteful to predators. The larvae

of Monarchs eat milkweeds and their distasteful plant chemicals cause potential predators to avoid eating both the larvae and adults.



Pictures: In the pictures which follow, butterflies are grouped according to their sizes, as they would appear with their wings folded over their backs. Small is about the diameter of a marble; medium is about the diameter of a golf or ping pong ball; and large is near the diameter of a tennis ball. Within size groups, those butterflies which are more likely to be seen earlier in the season (April or May) are shown first, with those appearing later in the season shown later (Sp=Spring, Su=Summer, Fa=Fall), though seasonality varies for all species. The English names are the same as those recommended in the publication, *Checklist and English Names of North American Butterflies, 2nd ed.*

Small Butterflies (diameter of a marble):



Pearl Crescent (Sp,Su,Fa)



Juniper Hairstreak (Su)



Eastern Tailed-Blue (Sp,Su)



Striped Hairstreak (Su)

Medium Butterflies (diameter of a golf ball):



Mourning Cloak (Sp,Su,Fa)



Cabbage White (Sp,Su,Fa)



Baltimore Checkerspot (Su)



Common Wood-Nymph (Su)

Large Butterflies (diameter of tennis ball):





(Sp,Su)

Eastern Tiger Swallowtail Black Swallowtail, Female (Su)





Spicebush Swallowtail (Su)

Monarch, Male (Su,Fa)

Conservation: Outside of FLNF, most butterflies are not protected in any way. Indiscriminate use of pesticides, even biological control agents like Bacillus thuringiensis (Bt), can kill caterpillars and adults. Destruction of habitats and loss of important food plants through indiscriminate use of herbicides and excessive moving for lawns can reduce butterfly numbers. Species whose larvae feed on only one

or a very few different kinds of plants are especially vulnerable. There are many kinds of plants, both native and cultivated, that are attractive to butterflies for nectar or provide food for caterpillars. Planting butterfly gardens can be a particularly enjoyable way to attract butterflies to your yard for closer study and can contribute to their conservation in some cases. For example, in Florida, the range of the beautiful, little Atila has expanded as gardeners and professional landscapers have begun deliberately to plant its larval food plant, a native cycad (Coontie), as an ornamental.

Butterfly Habits and Habitats

(table of illustrated species)

English Name	Habitat	Larval Food Plants
Pearl Crescent	Fields, roadsides	Asters
Eastern Tailed- Blue	Fields, roadsides	Pea family (clovers)
Juniper Hairstreak	Fields with Eastern Red Cedar	Eastern Red Cedar
Striped Hairstreak	Thickets, forest edges	Wild Black Cherry, blueberries
Mourning Cloak	Forests, forest edges, trailsides	Willows
Baltimore Checkerspot	Fields or moist meadows	Turtlehead and English Plantain
Cabbage White	Fields, roadsides	Mustards
Common Wood- Nymph	Fields, roadsides	Grasses
Eastern Tiger Swallowtail	Forests, forest edges	Wild Black Cherry and Tuliptree
Black Swallowtail	Fields, roadsides	Carrot family (Queen Anne's Lace)
Spicebush Swallowtail	Forests, forest edges	Spicebush, Sassafras
Monarch	Fields, roadsides	Milkweeds

References and Learning Resources:

Field Guides:

Allen, T.J., J.P. Brock, and J. Glassberg. 2005. Caterpillars in the Field and Garden: A Field Guide to the Butterfly Caterpillars of North America. Oxford University Press, New York, NY. 232 pp.

Brock, J.P. and K. Kaufman. 2003. Butterflies of North America.. Houghton Mifflin, New York, 384 pp.

Glassberg, J. 1999. Butterflies through Binoculars: The East. Oxford University Press, New York, NY. 242 pp.

Glassberg, J. 2012. A Swift Guide to Butterflies of North America. Sunstreak Books, Inc. 416 pp.

Desk References:

Cech, R. and G. Tudor. 2005. Butterflies of the East Coast: An Observer's Guide. Princeton University Press, Princeton, NJ. 345 pp.

Layberry, R.A., P.W. Hall, and J.D. Lafontaine. 1998. The Butterflies of Canada. University of Toronto Press, Toronto, Ontario. 280 pp.

Standard Reference for English and Scientific Names:

Cassie, B., J. Glassberg, A. Swengel, and G. Tudor. 2001. Checklist and English Names of North American Butterflies, 2nd ed. North American Butterfly Association, Morristown, NJ. 59 pp.

Butterfly Gardening:

Tekulsky, M. 1985. The Butterfly Garden. Harvard Common Press, Boston, MA. 144 pp.

Internet Resources:

Lotts, K. and T. Naberhaus, Coordinators. 2014. Butterflies and Moths of North America.

http://www.butterfliesandmoths.org/ (Version 18 August 2014).

North American Butterfly Association: http://www.naba.org/



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