Plants that attract butterflies in North Carolina's Coastal Plain

Larval Host Plants -provide food for caterpillars

SHRUBS AND TREES

Sassafrass (Sassafras albidum), Bays (Persea spp.), Willow (Salix spp.), Oaks (Quercus spp.), Hickories (Carya spp.), Walnuts (Juglans spp.), Wax Myrtle (Morella spp.), Sumac (Rhus spp.), Blueberry (Vaccinium spp.), Rose (Rosa spp.), Holly (Ilex spp.), Red Cedar (Juniperus virginiana), Switchcane (Arundinaria spp.)

HERBACEOUS PLANTS

Carrot Family (*Apiaceae*) Plants: Rattlesnake Master, Snakeroot. Water Parsnip

Mallow Family (Malvaceae): Hibiscus, Mallow

Legumes/Pea Family (Fabaceae): Butterfly Pea

Milkweeds and Butterfly Weeds (Asclepias spp.)

Grasses and Sedges (Poaceae & Cyperaceae)

Passionflower Vines (Passiflora spp.)

Aster Family (Asteraceae): Blanketflowers, Sunflowers, Coneflowers

NATIVE NECTAR PLANTS provide nectar as a food source for adult butterflies

Coral Honeysuckle (Lonicera sempervirens)

Milk and Butterfly Weed (Asclepias spp.)

Buttonbush (Cephalanthus occidentalis)

Wild Bergomot/Bee Balm (Monarda fistulosa)

Joe-Pye Weed (Eutrochium spp.)

Blanketflower (Gaillardia pulchella)

Gayfeather (Liatris spp.)

Goldenrod (Solidago spp.)

Trumpet Creeper (Campsis radicans)

Cross Vine (Bignonia capreolata)

Carolina Jessamine (Gelsimium sempervirens)

Meadow Beauty (Rhexia spp.)

Seashore Mallow (Kosteletzkya virginica)

Passionflower (Passiflora spp.)

Sweet Pepperbush (Clethra alnifolia)







from top: Butterfly Weed flower, Meadow Beauty flower PHOTOS @ RACHEL VEAL/TNC: Liatris with monarchs and fritillaries PHOTO @ US FISH AND WILDLIFE



Butterfly Life Cycle

Butterflies and moths are known collectively as Lepidopterans. There are over 180,000 species of butterflies and moths in the world. Some migrate long distances, while others overwinter in the same location that they spend the summer. Each one has a different life strategy, but all butterflies and moths have a life cycle with four different life stages: (1) Egg, (2) Larva (Caterpillar), (3) Chrysalis (4) Adult (Butterfly or Moth). This life cycle is known as metamorphosis. Some butterflies will complete one life cycle per year, while others, like the monarch, will complete several.

For more information about Butterflies, check out The Nature Conservancy's science blog:

blog.nature.org/science/citizen-science-butterflies-mothsnature-conservation

For more information about creating your own butterfly garden, check out these websites:

content.ces.ncsu.edu/butterflies-in-your-backyard carolinanature.com/plants4leps.html

Life Cyle: (1) Monarch Egg PHOTO © KEVIN ARNOLD/TNC; (2) Monarch Caterpillar PHOTO © CHRIS HELZER/TNC; (3) Monarch Chrysalis; and (4) Monarch Butterfly PHOTOS © MATT TILLET

Cover: Girls in the Garden PHOTO © JULY RACHEL VEAL/TNC; from left: Black Swallowtail PHOTO © JULY RACHEL VEAL/TNC; Giant Swallowtail PHOTO © RAYMOND AUGER TNC; Spicebush Swallowtail PHOTO © JULY RACHEL VEAL TNC;

BUTTERFLIES

At Nags Head Woods Preserve



The Butterfly Garden

Located at the entrance to the ADA trail (#6), our Butterfly Garden contains a variety of native plants that provide food for both butterflies and caterpillars. A list of these plants can be found in the garden along with more information about its creation. Though some butterflies can be seen year round, late spring through early fall is the best time to spot butterflies at Nags Head Woods.

Butterflies are amazing creatures that taste with their feet smell with their antennae, and breathe through tiny openings, called "spiracles," on their bodies! At least 50 different species of butterflies can be found at Nags Head Woods Preserve. How many can you find?



Nags Head Woods Preserve www.nature.org/nhw



What is a host plant?

Think of a host plant as a butterfly nursery. Most caterpillars are very picky when it comes to their diet. Adult butterflies will lay their eggs on the right plant to provide food for the young caterpillars. Some caterpillars, such as monarchs, store toxins from their larval food source that make them poisonous or taste yucky as adults. Others, such as the carnivorous Harvester caterpillar, eat aphids instead of plants.

Where do adult butterflies get their food?

Most butterflies eat nectar. The type of flower that a particular butterfly species prefers will vary depending on (1) the size of its feeding tube, which called a proboscis, (2) the type of color receptors in its eyes, and (3) the size and feeding habits of the butterfly itself. It is best to provide a variety of nectar plants that will bloom throughout the growing season to attract a wide variety of butterflies. You may even attract some moths as many also feed on nectar! Some butterflies don't feed on nectar but instead prefer to feed on rotting fruit, rotting plants, or tree sap. There are even butterflies that feed on aphid honeydew, a sugar-filled sticky liquid that is secreted by aphids as they feed on plant sap.

Butterflies use their proboscis like a straw to consume nectar PHOTO © RACHEL VEAL TNC

Butterflies to look for at Nags Head Woods

D = documented at Nags Head Woods

E = expected (documented on the Outer Banks)

C = common (likely to be seen in the correct habitat and time of year)

U = uncommon | **R** = rare | **XR** = extremely rare

SWALLOWTALLS

Large, striking butterflies with hind wings usually displaying characteristic elongated tails

Black Swallowtail (D,C)

Eastern Tiger Swallowtail (D,C)

Palamedes Swallowtail (D,C)

Spicebush Swallowtail (D,C)

Giant Swallowtail (D,R)



WHITES AND SULPHURS

Medium to small wings that are white, yellow, or orange

Orange, Sleepy (E,C)

Sulphur, Clouded (E,R)

Sulphur, Cloudless (D.C)

Sulphur, Orange (E,U)



GOSSAMER WINGS

The adults are typically small to tiny and may be brilliantly colored when their wings are open

Azure, Summer (D.C)

Blue, Eastern Tailed (E,U)

Elfin, Henry's (E,U)

Hairstreak, Gray (D,C)

Hairstreak, Great Purple (D,U)

Hairstreak, Red-banded (E,C)



from top: Spicebush Swallowtail PHOTO © DON HENISE; Orange Sulphur PHOTO © CHRIS HELZER TNC; Gray Hairstreak PHOTO © RACHEL VEAL TNC

right, from top: Red Admiral Photo © TIMOTHY T LINDENBAUM TNC: Red Spotted Purple Photo © GREG GILBERT; Mourning Cloak Photo © DALE REHDER TNC; Silver Spotted Skipper Photo © RACHEL VEAL TNC

BRUSHFOOTS

Vary considerably in appearance; medium to large and brightly and/or uniquely marked

Admiral, Red (D.C)

Buckeye, Common (D,C)

Comma, Eastern (E,R)

Crescent, Pearl (D)

Fritillary, Gulf (D)

Fritillary, Variegated (E)

Lady, American (E,C)

Lady, Painted (E,R)

Monarch (D,C)

Mourning Cloak (D,U)

Pearly Eye, Southern (D,C)

Queen (E,R)

Question Mark (D,C)

Red-spotted Purple (D,C)

Satyr, Carolina (E,C)

Viceroy (D,C)

Wood Nymph, Common (D,C)

Zebra Longwing (E,XR)







SKIPPERS

Skippers are small, mostly drab colored butterflies that are named after their quick, darting flight habits. Unlike other butterflies, their antennae clubs are hooked backward like a crochet hook.

Aaron's Skipper (E,U)

Fiery Skipper (E,C)

Horace's Duskywing (E,C)

Least Skipper (D,C)

Long-tailed Skipper (E,U)

Salt Marsh Skipper (D,C)

Silver-Spotted Skipper (D,C)



Come by our Visitor's Center during office hours for a complete list butterflies and more information about all our Lepidopteron friends!