

# ASHEVILLE BUTTERFLY TRAIL

**A Pollinator Conservation Initiative of Bee City USA - Asheville**

https://beecityasheville.org/avl-butterfly-trail

BEE CITY USA®
ASHEVILLE

**Thanks to the Black Mountain Town Council and Emily Sampson (Patchwork Meadows) for supporting the creation of a monarch waystation at Veterans Park where monarchs migrate through each fall.**

**Bee City USA-Asheville requests permission to place a monarch Trail station near the milkweed meadow to showcase ideal habitat for reversing their declines.**



Photo: Renee Caldwell

Approximate local journal entry from turn of 20th century:
*"The skies were black today with migrating monarchs."*

# The Plan:

**WHO: The Asheville Butterfly Trail,**
an initiative of Bee City USA-Asheville

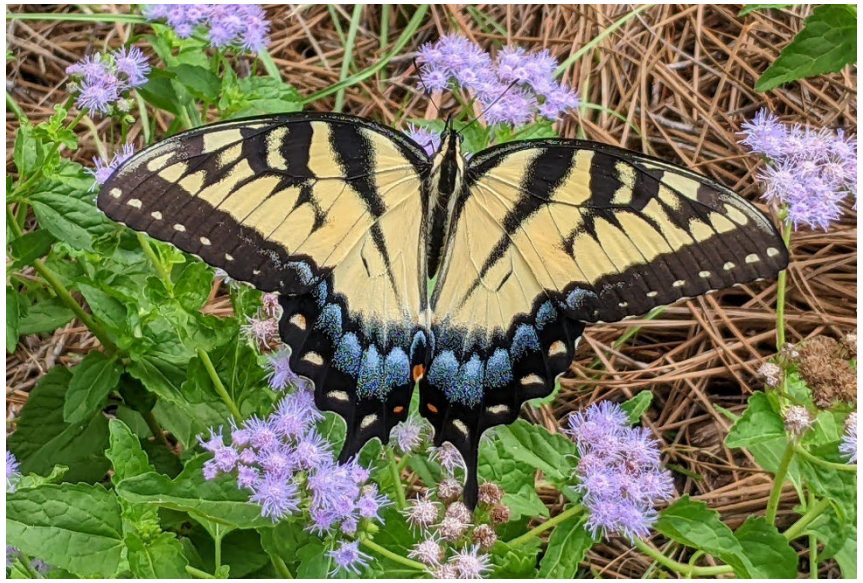
**WHAT: 10-15 Butterfly Trail Stations**
Each station features a human-sized WNC native butterfly along with its native host plant(s) on site.

**WHERE:** Across **Buncombe County, North Carolina** including Black Mountain and Weaverville.

**WHEN: 4 Stations are live already!** The 5th Station will be installed in November. More Stations on the way as funding allows.









# WHY?

**The Asheville Butterfly Trail provides a fun, free, engaging and educational activity** for local community members, school children, and for tourists visiting the area.

**Each selfie-encouraging Trail Station** invites folks into the world of pollinator conservation – including the essential part pollinators play in sustaining the natural world, why creating pollinator habitat is so vital, and the important relationship between native plants and pollinators.

**Educational signage** provides immediate information and fun facts about the butterfly – with QR codes leading to our website for a deeper understanding of that butterfly and the importance of pollinator conservation in general.

# Station 1

**Butterfly:**
**Eastern Tiger Swallowtail**

**Thanks to our Sponsor:**
**Asheville Chamber of Commerce**

**Location:**
Asheville Visitor Center,
36 Montford Ave. Asheville

**Installed:**
July 2024

**Dedicated:**
August 29, 2024



# Asheville Butterfly Trail

An Initiative of Bee City USA - Asheville

# Eastern Tiger Swallowtail

*Papilio glaucus*

Bee City USA® Asheville

beecityasheville.org

Scan this QR code to download the map, passport, and coloring book, and explore the Trail.

## Male & Female Forms

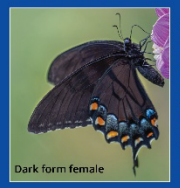



Males generally have a fully yellow and black pattern on their hindwings. They lack the blue scales displayed by females.




Photos: Pete Dixon

Females have a second, dark form, that seems to mimic the Pipevine Swallowtail. This only occurs within the Pipevine's breeding range.




This mimicry is probably to deceive predators into thinking they carry distasteful toxins from the pipevine plant.

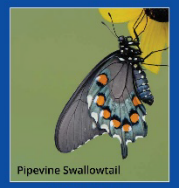
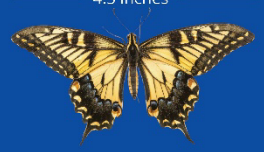



Photo: Doug Tallamy

## Average Wingspan

*Actual size shown here*

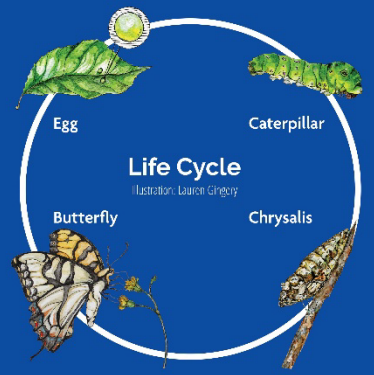
4.5 inches



## Distribution



Look for them between March and October in Western North Carolina where they typically have two generations per year.




## Common Host Plants

Adult butterflies drink nectar from a wide variety of flowers. As caterpillars, they are picky eaters and only eat the leaves of specific host plants.

**Sweetbay Magnolia Tree**
*Magnolia virginiana*



**Wild Black Cherry Tree**
*Prunus serotina*



**Tulip Poplar Tree**
*Liriodendron tulipifera*



## Fun Facts

- It is the state butterfly of North Carolina, South Carolina, Georgia, Alabama, and more.
- Tiger Swallowtails are among the largest butterflies in the USA.
- There is a larger look-alike in Western North Carolina known as the Appalachian Tiger Swallowtail.
- The Eastern Tiger Swallowtail is the prime pollinator of Flame Azaleas. As they drink azalea nectar, they hover and flap their wings, attaching pollen grains to their wing scales which pollinate the next Flame Azalea flowers they visit.



**Flame Azalea**
*Rhododendron calendulaceum*

## Caterpillar Superpowers

Tiger Swallowtail caterpillars have 5 ways to protect themselves!



Photos: Doug Tallamy

1. After hatching they roll up in a leaf to hide.

2. Young caterpillars resemble brown and white bird poop. Who wants to eat that?



3. Later, they turn bright green and have false eyespots on an outsized head to look like a snake!

4. If threatened, they project their orange osmeterium (that looks like a forked tongue) that releases disgusting chemicals.

5. To escape predators they can literally hang by a thread they spun!



Photo: Sam Jaffe and The Caterpillar Lab

Thanks to Our Sponsor!

Asheville Area Chamber of Commerce

Sign design by Scraggy's Beescaping

# Station 2: Gulf Fritillary

**Thanks to our Sponsor:**
**Reems Creek Nursery**

**Location:**
**Reems Creek Nursery**
**76 Monticello Rd. Weaverville**

**Installed:**
July 2024

**Dedicated:**
Sept. 12, 2024



Scottie Harris, Weaverville Town Manager
(formerly Director of Fire Department)

ASHEVILLE BUTTERFLY TRAIL

An Initiative of Bee City USA - Asheville

# GULF FRITILLARY

*Agraulis vanillae*

BEE CITY USA® ASHEVILLE

beecityasheville.org

Scan this QR code to download the map, passport, and coloring book, and explore the Trail.

## Adult Butterfly





Photo Above and Below: Sharon Mammoser

Males (shown here) have longer and more pointed forewings.

Females are usually larger, with a slightly darker color and deeper markings.

The under (ventral) wings of both sexes are different from the top (dorsal) wings, presumably for camouflage while perching with wings closed.

## Average Wingspan

*Actual size shown here*

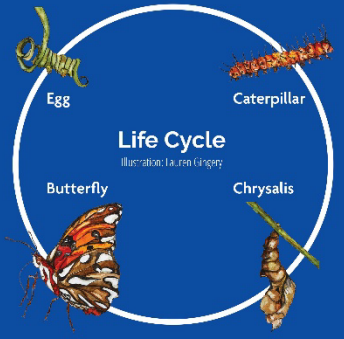
Thanks to Dr. Matt Bertone, North Carolina State University, for his photo of the giant wings!




## Distribution



They have multiple generations each year. In WNC, we may see them from May to the first hard freeze.




## Caterpillar Host Plants

Gulf Fritillaries lay their eggs on all Passionflower species including two that are native to Western North Carolina.

The leaves and vines of the Passionflower plant are the sole food of Gulf Fritillary caterpillars, but adult butterflies drink nectar from a wide variety of flowers.

**Purple Passionflower**
*Passiflora incarnata*



Photo: Ruth Gonzalez

**Yellow Passionflower**
*Passiflora lutea*



Photo: Debbi Rees

## Fun Facts

- Monarchs aren't the only butterflies that migrate! Gulf Fritillaries migrate north to the southeastern U.S. in spring to breed, and their offspring migrate as far south as South America in late summer and early fall to overwinter. Unlike Monarchs, individuals only migrate one direction, not both.
- They are members of the Brush-Footed Butterfly group (Nymphalidae). Do you see the short, brushy legs next to their eyes? They are on either side of the curled orange proboscis, or "tongue."

  Those "hairs" ("setae") are used for smelling and tasting, which is useful for ensuring they are laying their eggs on Passionvine!



Photo: Sharon Mammoser

## Superpowers

- Their brown chrysalis fools predators by passing as an unappetizing dead leaf!
- To trick predators, Gulf Fritillary caterpillars (as seen below) have spikes along their body. They look scary, but they are harmless.
- As adults, their bright orange and black colors are a warning signal to vertebrate predators. They can also release a stinky fluid from special abdominal glands to keep predators at bay.





Photo: Heather Reyburn

Thanks to Our Sponsor!

REEMS CREEK NURSERY EST. 1979

Sign design by Soligyl's Basscaping

# Station 3: Common Buckeye



## Thanks to our Sponsors:

**Suzanne Wodek, i**n loving memory of her father**, Robert J. Parr**

**The Glass Foundation, Inc.**

**Liz Lesesne, i**n loving memory of her mother, **Sarah Frances Brodie Lesesne**

## Location:

**UNCA – Glenn's Creek Greenway**

## Installation:

Feb. 17, 2024

## Dedication:

May 6, 2025

# Asheville Butterfly Trail

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# Common Buckeye

*Junonia coenia*

Bee City USA® Asheville

beecityasheville.org

**Scan this QR code** to download the map, passport, and coloring book, and sign the guestbook.

## Adult Butterfly





Photo Above and Below: Pete Dixon

Native Americans noticed the resemblance of the butterfly's wing eyespots to male deer's eyes, and gave it the name Buckeye.

As they sip nectar, adult butterflies carry pollen from flower to flower.

## Average Wingspan

*Actual size shown here*

Become a butterfly - take a photo in front of the wings!

Thanks to Dr. Matt Bertone of North Carolina State University for providing a perfect photo to make the giant wings.

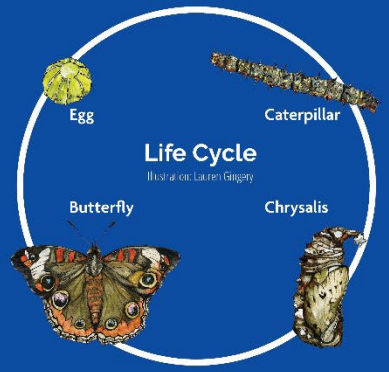



## Distribution



In Western North Carolina, Buckeyes produce multiple generations annually, emerging from May to October.

They migrate south in the fall and their offspring fly north to breed the following year.




## Caterpillar Host Plants

The Common Buckeye lays a single green egg on the upper side of the leaves of many local native species.

However, the plantain family is their favorite, including nonnative snapdragons and the European plantain that plagues lawn enthusiasts as a weed.

**Woodland Stonecrop**
*Sedum ternatum*

Succulent ground cover that hosts Buckeye and Variegated Fritillary caterpillars. It is tolerant of shade, rabbits, and deer.



**Appalachian Beardtongue**
*Penstemon canescens*

The leaves of Penstemon provide food for Buckeye caterpillars, but the nectar of the flowers is out of reach for their butterflies' tongues.



Photo: Penny Longhurst

## Fun Facts

- With a brief adult lifespan of 6-20 days, territorial male Buckeyes guard areas of bare ground or low nectar plants, waiting to mate with females. The female (on right) is larger than the male.
- The Buckeyes above emerged in summer, so the underside of their wings is brown to tan. If they emerge in autumn, it's deep rosy brown.



Photo: Pete Dixon



Photo: David Kastner

## Superpowers

- Eyespots on the wings intimidate predators by making them look like larger animals.
- Predators avoid Buckeye caterpillars thanks to their diet of plants loaded with toxic iridoid glycoside chemicals and their scary (but harmless) spikes.
- When a caterpillar transforms into a butterfly, its three pairs of true legs develop into adult legs, while its prolegs completely disappear.




Photo: Judy Gallagher


### Thanks to Our Sponsors!

*Suzanne Wadek, in loving memory of her father,* ***Robert J. Parr***

GLASS FOUNDATION, INC.

***Liz Lesesne,*** *in loving memory of her mother,* ***Sarah Frances Brodie Lesesne***


Sign design by Spriggly's Beescaping

# Station 4: Summer Azure



**Thanks to our Sponsors:**
Carmody-Peterson Family

**Location:**
Audubon Bird Sanctuary at Beaver Lake, Merrimon Ave., Asheville

**Installation:**
July 28, 2025

**Dedication:**
September 28, 2025

# Coming soon--Station 5: Red-Spotted Purple



**Thanks to our Sponsors:**
**Town of Weaverville**
**Futch Family Foundation**

**Location:**
**11 North Main Street, Weaverville**

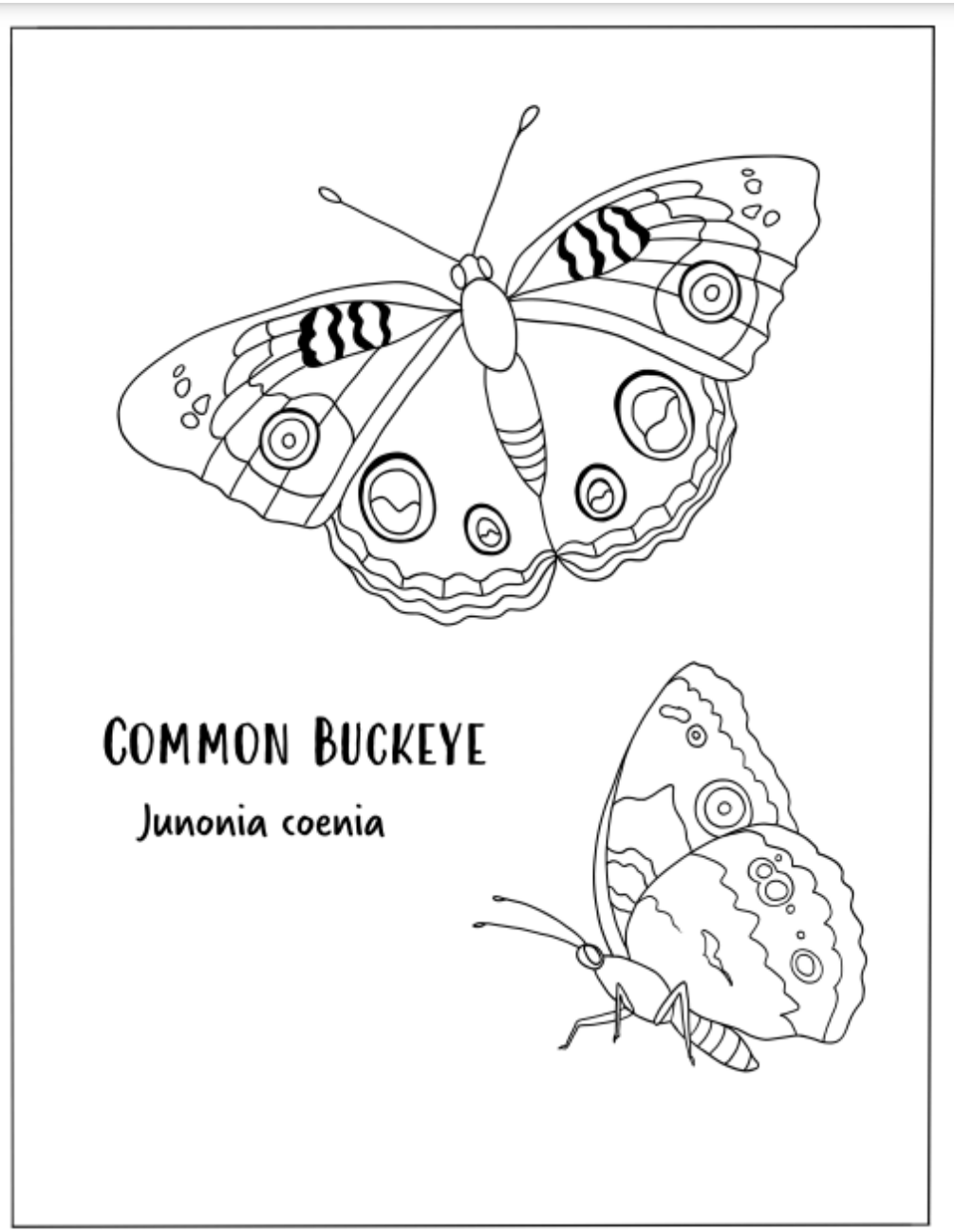
**Installation:**
November, 2025

**Dedication:**
_____, 2025

Photo: Pete Dixon

# Downloads:

- Coloring Book
- Trail Map (coming soon)




Coloring Book page by Nina Veteto

# Special Thanks to:

## Hocking Hills Butterfly Trail

Huge thanks for the generous support of the **Trail Station Sponsors** and to the sustaining help from the donors to the **Friends of the Asheville Butterfly Trail**!



**Dr. Matt Bertone,** NCSU, Director of NC State's Plant Disease and Insect Clinic, for the large-file specimen photos that allow the giant wings to shine.

**Asheville Butterfly Trail Committee Members:**
Renee Caldwell, Paula Caycedo, Virginia Currie, Ruth Gonzalez, Cathy Davenport, and Nina Veteto, April Boone, Phyllis Stiles





**Sharon Mammoser** and **Pete Dixon** and many other photographers, both local and distant, for the use of their fabulous photos.



**Amy Landers** for our inspiring website design.

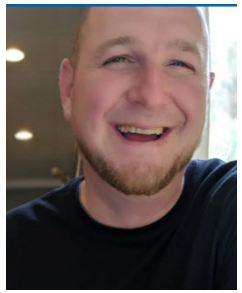


**Jill Jacobs** for the design of our educational signage.

**UNC-Asheville's NEMA team** for their extensive research on the individual butterflies, and **Lauren Gingery** for her exquisite illustrations of the butterfly life cycles.

**Barbara Anuzis** for her expert butterfly, caterpillar, and host plant research to get the Trail started.

**Super Rob,** The Super Sign Guy, for wing and sign production and installation.



# Proposed Veterans Park Trail Station

**Siting considerations:**

- close to monarch meadow
- accessible to parking
- NOT in disc golf fairway
- With clear signage directing visitors to park in Community Garden lot and walk over to Trail station.

**Funding considerations @ $15,000:**

$5000—design, production, installation
$5000—stewardship (payable @ $1000/yr X 5 yrs)
$5000—project coordinator fund

**Good News! Beatrice MacQueen pledged $5000 in memory of her sister.**



**THANKS!**

- Josh Henderson, BM Recreation & Parks Director
- Emily Sampson, Black Mountain Monarch Waystations
- Leonora Stephanile, Dr. John Wilson Community Garden

They met with disc golf community leaders to determine best possible placements.



# Thank you for considering a Trail Station at Black Mountain's Veterans Park!

## QUESTIONS?

Phyllis Stiles, Chair, Bee City USA-Asheville
info@beecityasheville.org