Coastal WildScapes

Session 1: Our Wild Coast

Planting for Native Wildlife

10:00 am – 11:15

- **Speaker 1** – Backyard Wildlife Habitat – *Eamonn Leonard – Georgia DNR* – 15 mins

- **Speaker 2** – Designing for People and Nature– *Thomas Angell – Verdant Enterprises* – 15 mins

- **Speaker 3** – Native Plants for Pollinators – *Amy Schuler & Christa Hayes – Coastal WildScapes* – 15 mins

- **Discussion** – 30 minutes
- 11:30 **Lunch** & Keynote Address

What is Coastal WildScapes

- **Mission:** actively preserve and restore the highly significant biodiversity of Southeastern coastal ecosystems by protecting existing native habitats, rebuilding the connectivity of impaired habitats and minimizing the future fragmentation of the coastal landscape.
- **Through**:
  - Education Outreach
    - provide and facilitate presentations and field trips.
  - Conservation Initiatives
    - provide volunteers in partnership with other organizations to protect and rebuild habitats.
  - Grassroots Activities
    - stimulate opportunities to expand involvement and awareness of critical coastal issues.

www.coastalwildscapes.org

Backyard Wildlife Habitat

Eamonn Leonard

What does Wildlife Need?

"Birds abhor a clean yard.."

- **Space**
  - What type of yard (wooded, field…)
  - Habitat structure
- **Food**
  - Feeders, fruiting and flowering plants. Diversity (magnolia, black gum, elderberry, Little bluestem, trumpet creeper)
- **Water**
  - Baths, pools, streams, misters
- **Shelter**
  - Vegetation at multiple levels
  - Bird Boxes
  - Brush Piles
  - Standing snags

Native Plant Food Sources

- **Granivores** - eat seeds
  - Often will visit feeders
  - Try to use Native seed bearing plants too.
- **Frugivores** - eat fruit and berries
  - Visit fruiting shrubs, berries
- **Nectivores –** sugar rich nectar of flowers
  - Attracted to Natives with tubular flowers
  - Will visit supplemental feeders
- **Insectivores** –insects to feed self & young
  - Need native plants that support insects
    - Spiders, moths, butterflies, beetles, flies, mosquitos, ants, bees wasps, egg clusters, caterpillars, small lizards, **snails**, etc.
  - Caterpillars & other soft larvae insects for young

Common Resident Birds

Northern Cardinal – *Insectivore / Granivore / Frugivore*

Carolina Chickadee – *Insectivore / Granivore / Frugivore*

Tufted Titmouse – *Insectivore / Granivore / Frugivore*

Carolina Wren - *Insectivore / Granivore / Frugivore*

Blue Jay - *Omnivorous*

Blue Bird – *Insectivore / Frugivore*

Yellow-throated Warbler - *Insectivore*

Resident Woodpeckers

Downy Woodpecker *- Insectivore / Granivore / Frugivore*

Northern Flicker - *Insectivore / Granivore / Frugivore*

Pileated Woodpecker *- Insectivore / Frugivore/ Granivore*

Red-bellied Woodpecker - *Omnivorous*

Winter Birds

Yellow-bellied Sapsucker – *Insectivore / Frugivore/ Sap*

Cedar Waxwing – *Frugivore / Insectivore*

Ruby-crowned kinglet – *Insectivore / Frugivore / Granivore*

Dark-eyed Junco – *Granivore / Frugivore*

White throated Sparrow - *Granivore / Frugivore*

Goldfinch - *Granivore*

Summer Birds

Purple Martin - *Insectivore*

Summer Tanager – *Insectivore + G.*

Red eyed Vireo – *Insectivore / Granivore*

Orchard Oriole – *Insectivore + G*

Great-crested flycatcher – *Insectivore + G*

Northern Parula - *Insectivore + G*

Painted bunting - *Granivore + Insectivore*

Spring & Fall Birds

Blue Grosbeak – *Insectivore / Granivore*

Black-throated Blue Warbler – *Insectivore / Granivore / Frugivore / Nectivore*

Baltimore Oriole – *Insectivore / Granivore / Frugivore / Nectivore*

American Redstart – *Insectivore / Granivore / Frugivore*

Indigo Bunting – *Granivore / Insectivore / Frugivore*

Hummingbirds

Ruby-throated

Rufous

Allen's

Calliope

Black-chinned

- Try to keep flowering plants all year
- Summer – Ruby-throated Hummingbird
- Winter – variety of western species
  - Rufous, Allen's, Calliope, Black-chinned

Owls of Georgia

All possible Yard Birds

Barred Owl

Great Horned Owl

Barn Owl

Eastern Screech Owl

Raptors of Georgia

Red Tailed Hawk

American Kestrel

Osprey

Red Shouldered Hawk

Loggerhead shrike

Cooper's Hawk

Planting Natives for Birds

- **Trees**
  - **Black gum (*Nyssa sylvatica*)**
  - **Tulip poplar (*Liriodendron tulipifera*)**
  - **Native oaks (*Quercus, virginiana, Q. lyrata, Q. michauxii*)**
  - **American Beech (*Fagus grandiflora)***
  - **Hawthorns (*Crataegus sp*.)**
  - **Black Cherry (*Prunus serotina*)**
  - **Eastern Red Cedar (*Juniperus silicicola*)**
  - **Sweetgum (*Liqidambar styraciflua*)**
  - **Southern Magnolia (*Magnolia grandiflora*)**

Planting Natives for Birds

- **Shrubs**
  - **Southern Arrowwood (*Viburnum dentatum*)**
  - **Winged sumac (*Rhus copallinum)***
  - **Swamp Dogwood (*Cornus foemina)***
  - **Elderberry (*Sambucus canadensis)***
  - **American Beautyberry (*Callicarpa americana)***
  - **Devils Walkingstick *(Aralia spinosa)***
  - **Native Hibiscus (*Hibiscus sp., Kosteletzkya)***
  - **Native Azaleas (*Rhododendron canescens, R. viscosum)***
  - **Wax Myrtle *(Morella cerifera)***
  - **Yaupon Holly (*Ilex vomitoria*)**

Planting Natives for Birds

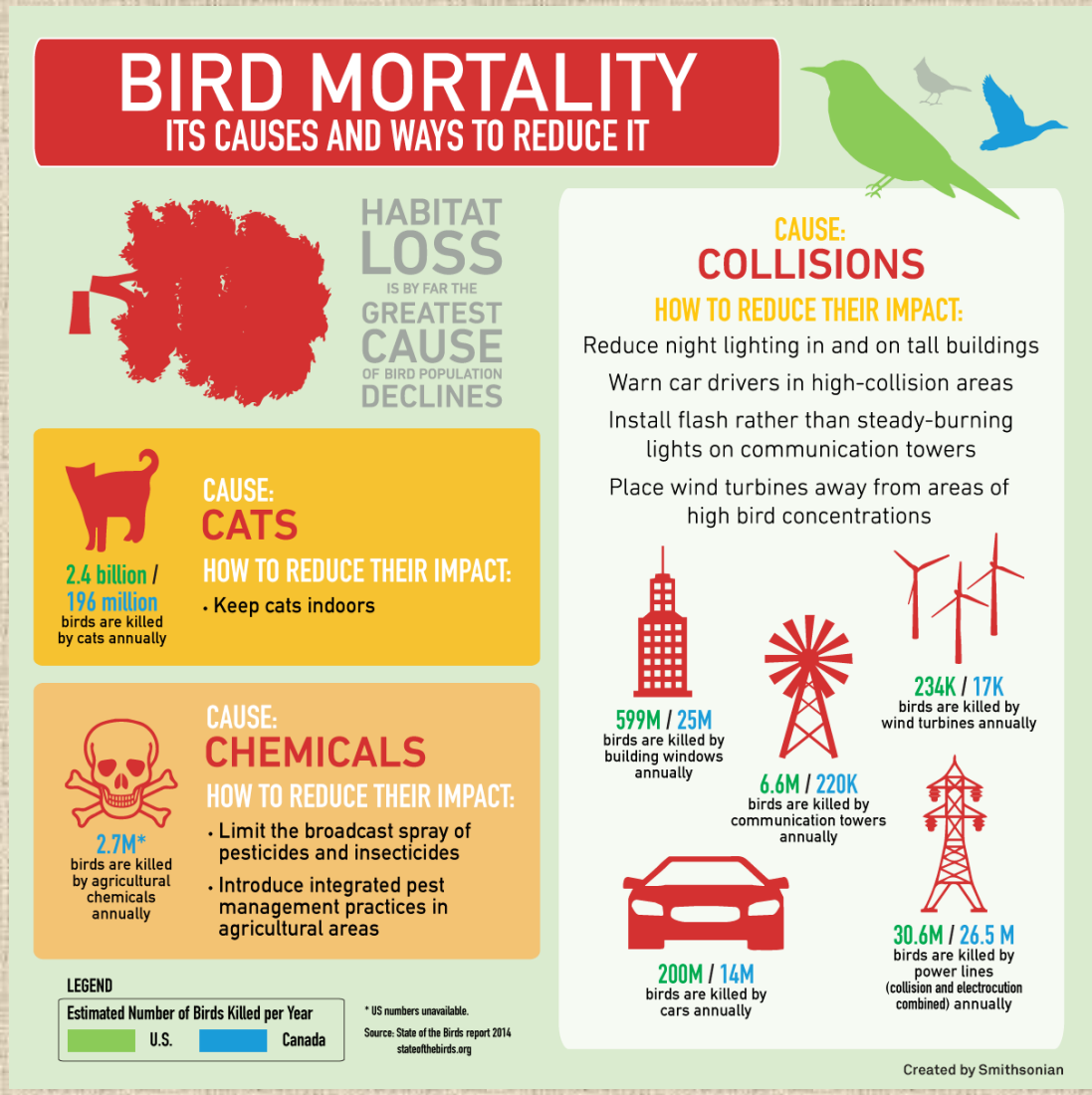
- **Vines**
  - **Muscadine (*Vitis rotundifolia*)**
  - **Cross vine (*Bignonia capreolata*)**
  - **Trumpet vine (*Campsis radicans*)**
  - **Poison Ivy (*Toxicodendron radicans*)**
  - **Coral Honeysuckle (*Lonicera sempervirens*)**
  - **Passion vine (*Passiflora incarnata*)**

Planting Natives for Birds

- **Herbaceous**
  - **Native Salvias (*Salvia coccinea, Salvia azurea*)**
  - **River Oats (*Chasmanthium latifolium*)**
  - **Tickseed (Coreopsis sp.)**
  - **Beebalm (*Monarda sp*.)**
  - **Blackeyes susan (*Rudbeckia sp.)***
  - **Cardinal Flower (*Lobelia cardinalis*)**
  - **Goldenrod (*Solidago sp.*)**
  - **Coral bean (*Erythrina herbacea*)**
  - **Little bluestem (*Schizachyrium scoparium*)**
  - **Purple lovegrass (*Eragrostis spectabilis*)**

Threats to Wildlife

- **Cats**
  - Keep cats indoors
  - Keep feeders and water sources open enough that cats can't sneak up on birds
- **Large window panes**
  - Stickers on window
  - Put feeders close to window
- **Diseases/rancid food**
  - clean and change feeders and food regularly
- **Invasive Species**
  - **Toxic seed –** Nandina / Birds
  - **Toxic litter –** Tallow / leopard frog
  - **Habitat loss** – nesting / structure
- **Herbicides/Pesticides**
  - Try a chemical free yard
- **Lack of food**
  - Seasonally appropriate food missing
  - Litter layer missing
    - Snails use liter (food for birds)
- **Lack of cover**
  - Lack of evergreen species
  - Litter layer missing
    - Reptiles and herps need for cover.



Coastal WildScapes

SPRING NATIVE PLANT SALE

SATURDAY APRIL 7, 2018
9am – 1pm
Ashantilly Center
Hwy. 99 Darien, Georgia



Vendors with diverse native plants for your landscape
Lecture on native azaleas of Georgia by Ernest Koone
Free educational programming, food and drinks
www.coastalwildscapes.org


Coastal WildScapes

Cay Creek Wetland Demonstration Garden

Designing for People & Nature

Thomas Angell

The Value of Wetlands

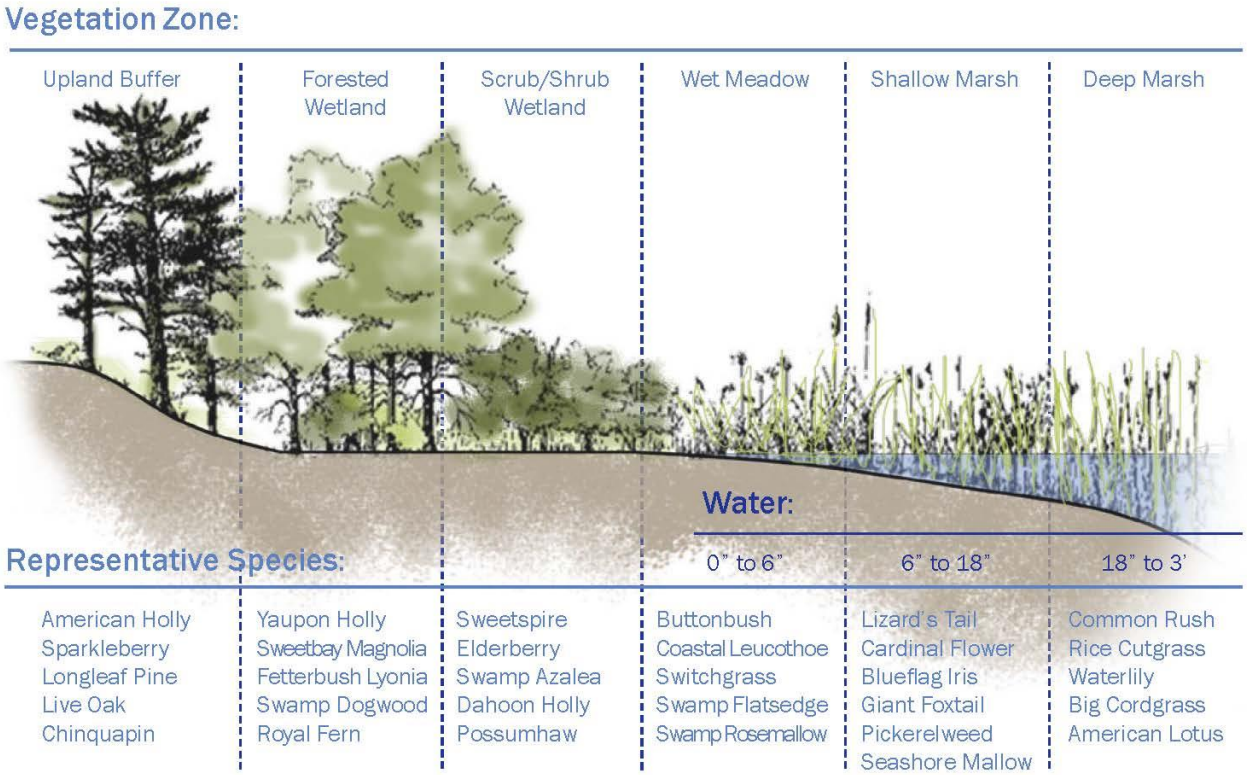
- Groundwater Recharge
- Flood Protection & Erosion Control
- Habitat & Species Diversification
- Aesthetics & Recreation
- Water Filtration Processes: Sedimentation, adsorption, biodegredation, filtration

Wetland Vegetation Zones

Wetland Vegetation Zones

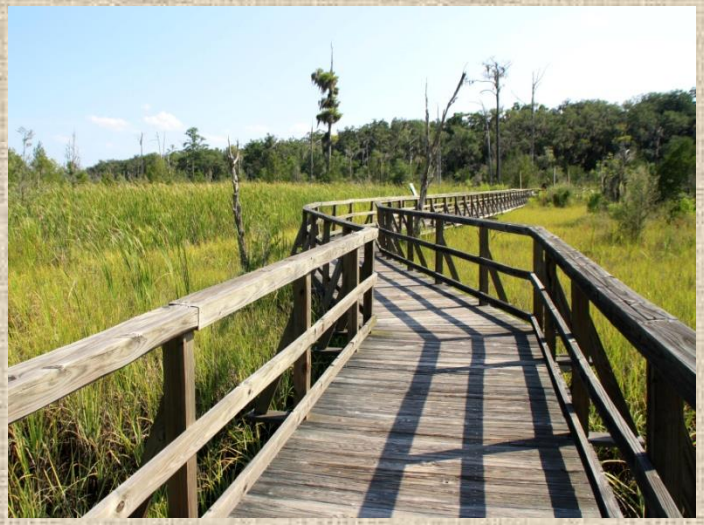
PLANTING TIPS:

- Look for ditches or ephemeral wetland areas in your neighborhood for cues about plant selection
- Most wetland species are deciduous so include some evergreen rushes and sedges for winter color
- Consider biodiversity and plants that benefit attractive wildlife like butterflies and birds



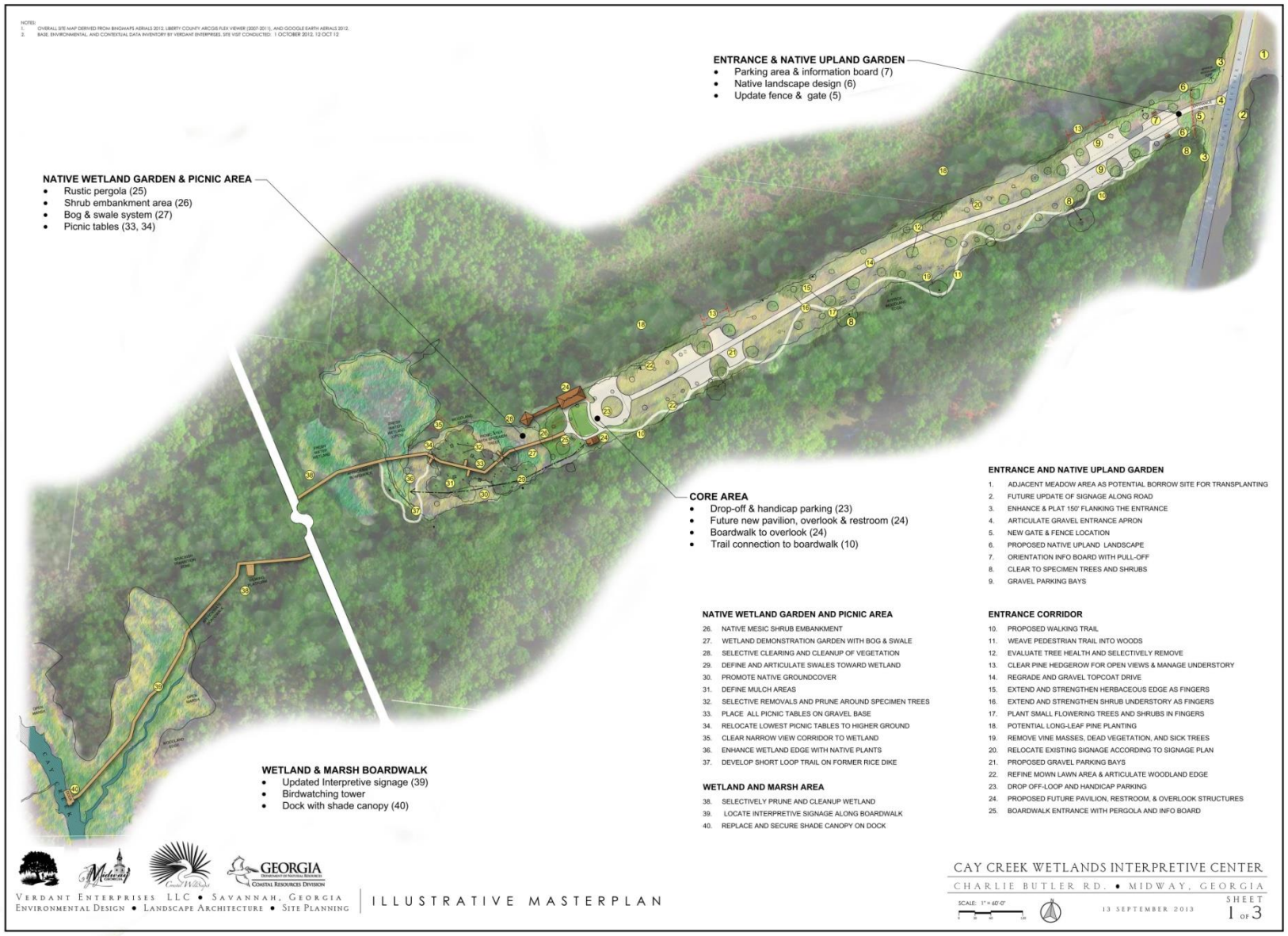
Graphic adapted from http://www.slideshare.net/GreenJayInt/wetland-plants

Cay Creek Habitat Diversity

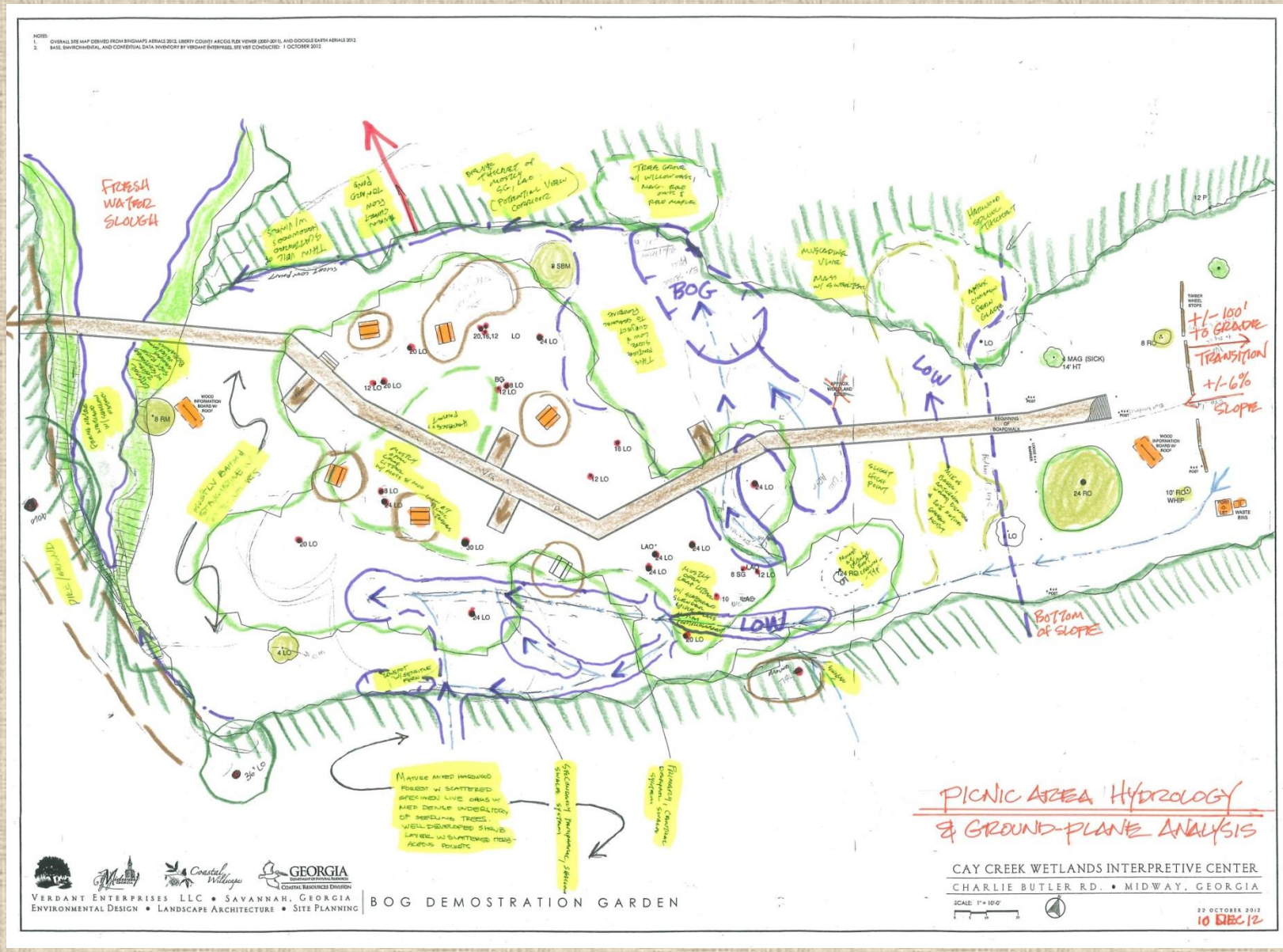


Existing Conditions & Uses

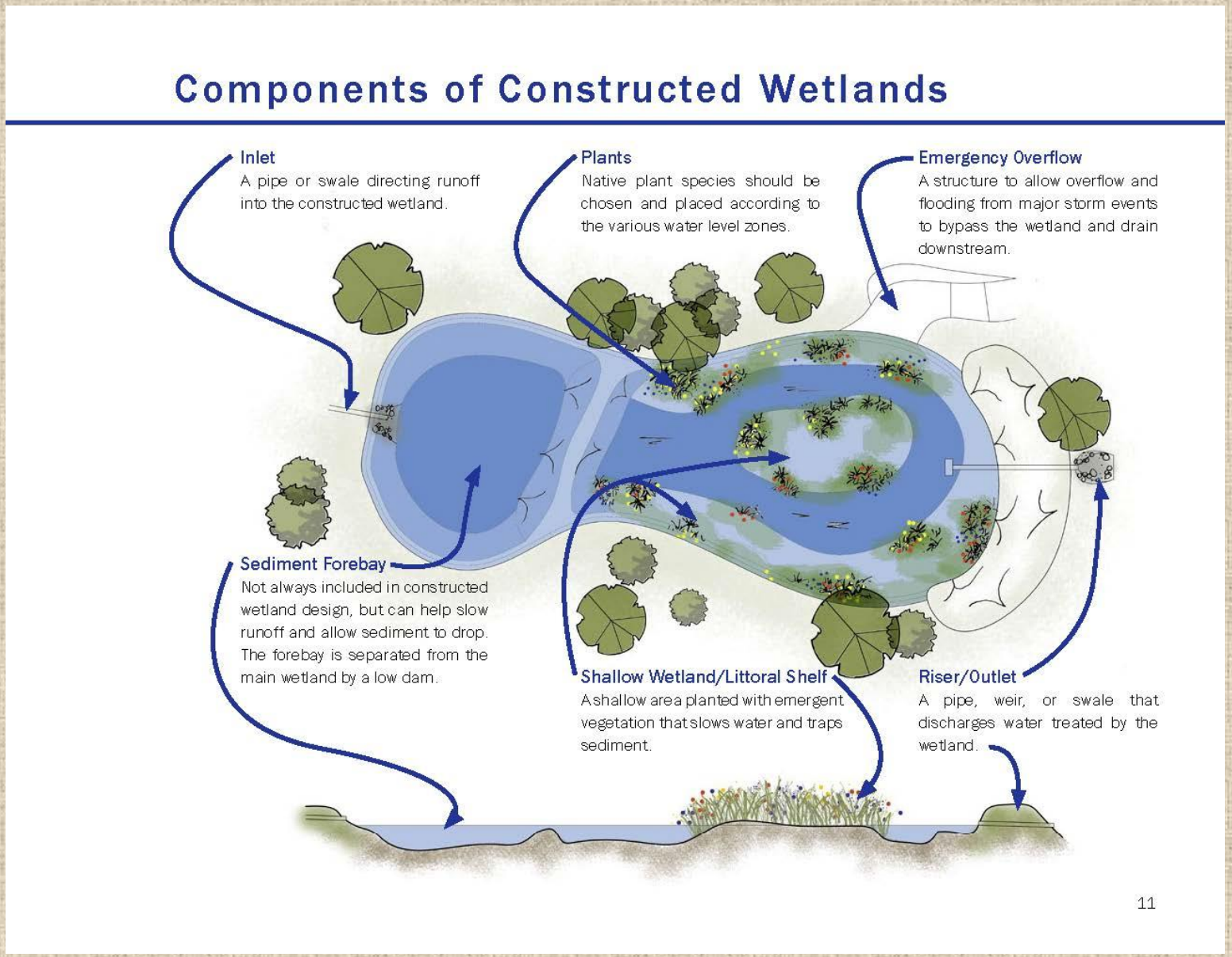
Master Plan


NOTES:
1. OVERALL SITE MAP DERIVED FROM BINGMAPS AERIALS 2012, LIBERTY COUNTY ARCGIS FLEX VIEWER (2007-2011), AND GOOGLE EARTH AERIALS 2012.
2. BASE, ENVIRONMENTAL, AND CONTEXTUAL DATA INVENTORY BY VERDANT ENTERPRISES. SITE VISIT CONDUCTED: 1 OCTOBER 2012, 12 OCT 12
ENTRANCE & NATIVE UPLAND GARDEN
Parking area & information board (7)
Native landscape design (6)
Update fence & gate (5)
NATIVE WETLAND GARDEN & PICNIC AREA
Rustic pergola (25)
Shrub embankment area (26)
Bog & swale system (27)
Picnic tables (33, 34)
CORE AREA
Drop-off & handicap parking (23)
Future new pavilion, overlook & restroom (24)
Boardwalk to overlook (10)
Trail connection to boardwalk (10)
WETLAND & MARSH BOARDWALK
Updated Interpretive signage (39)
Birdwatching tower
Dock with shade canopy (40)
ENTRANCE AND NATIVE UPLAND GARDEN
1. ADJACENT MEADOW AREA AS POTENTIAL BORROW SITE FOR TRANSPLANTING
2. FUTURE UPDATE OF SIGNAGE ALONG ROAD
3. ENHANCE & PLAT 150' FLANKING THE ENTRANCE
4. ARTICULATE GRAVEL ENTRANCE APRON
5. NEW GATE & FENCE LOCATION
6. PROPOSED NATIVE UPLAND LANDSCAPE
7. ORIENTATION INFO BOARD WITH PULL-OFF
8. CLEAR TO SPECIMEN TREES AND SHRUBS
9. GRAVEL PARKING BAYS
NATIVE WETLAND GARDEN AND PICNIC AREA
26. NATIVE MESIC SHRUB EMBANKMENT
27. WETLAND DEMONSTRATION GARDEN WITH BOG & SWALE
28. SELECTIVE CLEARING AND CLEANUP OF VEGETATION
29. DEFINE AND ARTICULATE SWALES TOWARD WETLAND
30. PROMOTE NATIVE GROUNDCOVER
31. DEFINE MULCH AREAS
32. SELECTIVE REMOVALS AND PRUNE AROUND SPECIMEN TREES
33. PLACE ALL PICNIC TABLES ON GRAVEL BASE
34. RELOCATE LOWEST PICNIC TABLES TO HIGHER GROUND
35. CLEAR NARROW VIEW CORRIDOR TO WETLAND
36. ENHANCE WETLAND EDGE WITH NATIVE PLANTS
37. DEVELOP SHORT LOOP TRAIL ON FORMER RICE DIKE
WETLAND AND MARSH AREA
38. SELECTIVELY PRUNE AND CLEANUP WETLAND
39. LOCATE INTERPRETIVE SIGNAGE ALONG BOARDWALK
40. REPLACE AND SECURE SHADE CANOPY ON DOCK
ENTRANCE CORRIDOR
10. PROPOSED WALKING TRAIL
11. WEAVE PEDESTRIAN TRAIL INTO WOODS
12. EVALUATE TREE HEALTH AND SELECTIVELY REMOVE
13. CLEAR PINE HEDGEROW FOR OPEN VIEWS & MANAGE UNDERSTORY
14. REGRADE AND GRAVEL TOPCOAT DRIVE
15. EXTEND AND STRENGTHEN HERBACEOUS EDGE AS FINGERS
16. EXTEND AND STRENGTHEN SHRUB UNDERSTORY AS FINGERS
17. PLANT SMALL FLOWERING TREES AND SHRUBS IN FINGERS
18. POTENTIAL LONG-LEAF PINE PLANTING
19. REMOVE VINE MASSES, DEAD VEGETATION, AND SICK TREES
20. RELOCATE EXISTING SIGNAGE ACCORDING TO SIGNAGE PLAN
21. PROPOSED GRAVEL PARKING BAYS
22. REFINE MOWN LAWN AREA & ARTICULATE WOODLAND EDGE
23. DROP OFF-LOOP AND HANDICAP PARKING
24. PROPOSED FUTURE PAVILION, RESTROOM, & OVERLOOK STRUCTURES
25. BOARDWALK ENTRANCE WITH PERGOLA AND INFO BOARD
GEORGIA
DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION
VERDANT ENTERPRISES LLC • SAVANNAH, GEORGIA
ENVIRONMENTAL DESIGN • LANDSCAPE ARCHITECTURE • SITE PLANNING
ILLUSTRATIVE MASTERPLAN
CAY CREEK WETLANDS INTERPRETIVE CENTER
CHARLIE BUTLER RD. • MIDWAY, GEORGIA
SCALE: 1" = 60'-0"
13 SEPTEMBER 2013
SHEET 1 OF 3

Picnic Area Hydrology Analysis



Components of Constructed Wetlands

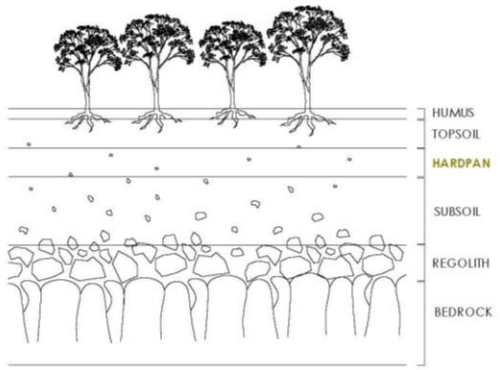


Wetland Demonstration Garden Plan

Lowcountry Hardscape

WHAT IS HARDPAN?

Hardpan refers to a dense layer of soil that typically sits below the uppermost soil layer, anywhere from 6 to 25 inches below ground. Hardpan can result from human practices, such as compaction from plowing or heavy traffic, or can be created by natural processes like glacial action or heavy rain. It is mostly impervious to water and restricts root growth, so strongly disliked by farmers and gardeners.



HARDPAN IN DESIGN

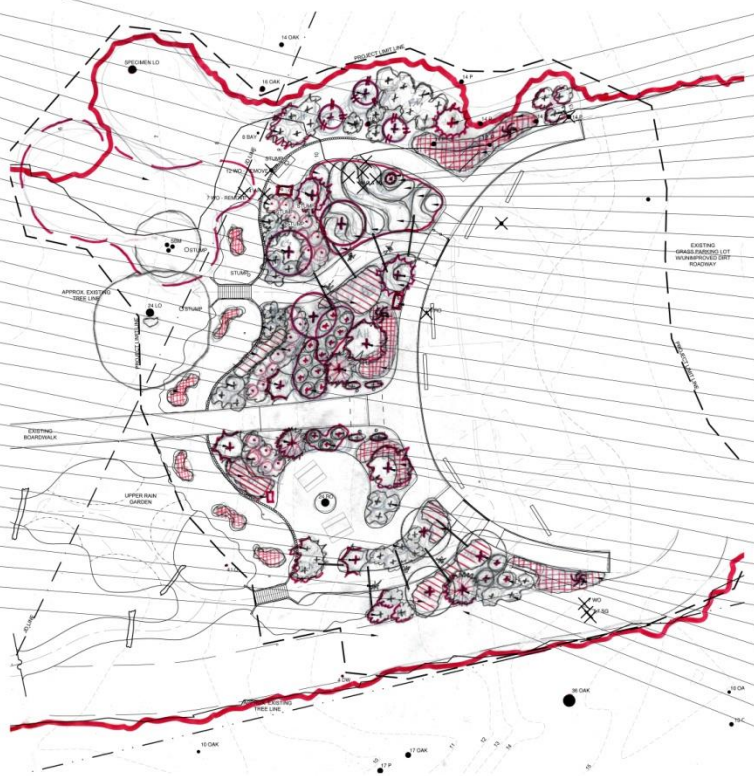
Hardpan can be a dynamic component in a designed landscape. Over time, the soft rock melts and morphs in response to environmental factors like water. The hardpan becomes host to bryophytes such as mosses and liverworts, and the designed element becomes a living sculpture in the landscape.

Native Plants

PLANTING SCHEDULE

ITEM	QTY	UNIT	NOTES
TREES:			
RED BUCKEYE *Aesculus pavia*	8	1 GAL	(8) DONATED BY ERNEST KOONE, @ 4' O.C.
AUTUMN BRILLIANCE SERVICEBERRY *Amelanchier X grandiflora 'Autumn Brilliance'*	3	6'-8'	@ 15' O.C.
CAROLINA SILVERBELL *Halesia carolina*	3	6'-8'	@ 15' O.C.
AMERICAN HOLLY *Ilex opaca 'Carolina #2', 'Greenleaf', or 'Eagleson', 'Savannah'*	2	8'-10'	Low branching, Full
AMERICAN SNOWBELL *Styrax americanus*	3	3 GAL	@ 5' O.C.
SHRUBS:			
BEAUTY BERRY *Callicarpa americana*	9	1 GAL	(9) DONATED BY ERNEST KOONE @ 4' O.C.
CHINQUAPIN *Castanea pumila*	3	3 GAL	
SWEET PEPPERBUSH *Clethra alnifolia*	6	3 GAL	@ 4' O.C.
STRAWBERRY BUSH *Euonymus americanus*	8	3 GAL	@ 4' O.C.
OAK LEAF HYDRANGEA *Hydrangea quercifolia*	8	1 GAL	(8) DONATED BY ERNEST KOONE @ 4' O.C.
YAUPON HOLLY *Ilex vomitoria*	3	15 GAL	
RED ANISE *Illicium floridanum*	6	1 GAL	(6) DONATED BY ERNEST KOONE @ 4' O.C.
VIRGINIA SWEETSPIRE *Itea v. 'Henry's Garnet', 'Merlot' or 'Saturnala'*	3 6	3 GAL 1 GAL	@ 4' O.C. (6) DONATED BY ERNEST KOONE
SHINY LYONIA *Lyonia lucida*	23	3 GAL	multi stemmed, full @ 3' O.C.
DEVILWOOD *Osmanthus americanus*	3		@ 10' O.C.
FLORIDA AZALEA *Rhododendron austrinum*	8	1 GAL	(8) DONATED BY ERNEST KOONE @ 42" O.C.
MOUNTAIN AZALEA *Rhododendron canescens*	11	1 GAL	(11) DONATED BY ERNEST KOONE @ 42" O.C.
BLUEBERRY MIX *Vaccinium darrowi, crassifolium, elliottii, myrsinites, stamineum*	45	1 GAL	(5) of each species @ 3' O.C.
ARROWWOOD VIBURNUM *Viburnum dentatum*	3	7 GAL	
PERENNIALS & VINES			
CLIMBING ASTER *Ampelaster carolinianus*	2	1 GAL	Train up pergola
CORAL HONEYSUCKLE *Lonicera sempervirens 'Coral'*	2	1 GAL	Train up pergola
BEAR GRASS *Yucca filamentosa*	3	1 GAL	
PERENNIALS *Gaillardia, Rudbeckia, Calamintha, Conradina, Verbena*	130	1 GAL	@ 18" O.C. - to be positioned by L.A., provide (26) each of 5 species
SWALE PLANTS *Blue-eyed Grass & Rattlesnake Master*	14	1 GAL	(7) each. To be positioned by L.A.
POLLINATOR GARDEN			All pollinator plants to be positioned in field by L.A.
BUTTERFLY WEED *Asclepias incarnata OR Asclepias tuberosa*	30	1 GAL	
PURPLE CONEFLOWER *Echinacea purpurea*	5	1 GAL	
PERENNIAL SUNFLOWER *Helianthus microphalus*	15	1 GAL	
PRAIRIE GAYFEATHER *Liatris spicata*	9	1 GAL	
BEE BALM *Monarda didyma OR Monarda fistulosa*	16	1 GAL	
PASSIONVINE *Passiflora incarnata*	3	1 GAL	
INDIAN PINK *Spigelia marilandica*	15	1 GAL	
GOLDENROD *Solidago odora OR Solidago shricta*	25	1 GAL	
ASTER *Symphyotrichum georgianum OR Symphyotrichum novae-angliae*	7	1 GAL	
VERBENA *Verbena canadensis 'Homestead Purple'*	15	1 GAL	
OTHER			
HARDWOOD MULCH	4,000	SF	Double shredded, aged hardwood, 3" installed depth

SELECTIVE CLEANUP OF WOODLAND EDGE AS DIRECTED ON SITE
(3) DEVILWOOD @ 10' O.C.
(3) STRAWBERRY BUSH @ 4' O.C.
(5) OAK LEAF HYDRANGEA @ 4' O.C.
(15) VERBENA - 45 SF @ 22 O.C.
(1) CHINQUAPIN
(9) SPINE OF LYONIA @ 3' O.C.
PRESERVE EXISTING FERN GLADE
(3) SWEET PEPPER BUSH @ 4' O.C.
(3)CAROLINA SILVERBELLS @ 15' O.C.
(3) VIRGINIA SWEETSPIRE @ 4' O.C.
(7) SWALE PLANTS
(11) BLUEBERRY MIX - 94 SF @ 3' O.C.
(3) SWEET PEPPER BUSH @ 3' O.C.
(9) SPINE OF LYONIA @ 3' O.C.
(5) BLUEBERRY MIX - 46 SF @ 3' O.C.
(1) ARROWWOOD VIBURNUM
(3) VIRGINIA SWEETSPIRE @ 4' O.C.
EXISTING PERENNIAL POCKETS
(1) YAUPON HOLLY
(1) ARROWWOOD VIBURNUM
(5) SPINE OF LYONIA @ 3' O.C.
(11) BLUEBERRY MIX - 62 SF @ 3' O.C.
MOVE EXISTING SIGNAGE
(5) STRAWBERRY BUSH @ 4' O.C.
(3) OAK LEAF HYDRANGEA @ 4' O.C.
(1) ARROWWOOD VIBURNUM
(7) SWALE PLANTS
(13) BLUEBERRY MIX-114 SF @ 3' O.C.
(3) RED ANISE @ 5' O.C.
SELECTIVE PRUNING TO ALLOW OCCASIONAL VEHICULAR ACCESS



(9) BEAUTY BERRY @ 4' O.C.
(1) CHINQUAPIN
(35) PERENNIALS - 80 SF @ 18" O.C.
(3) RED ANISE @ 4' O.C.
(1) BEAR GRASS
MOVE EXISTING SIGNAGE
(3) PASSIONVINE - TRAIN ON FOCAL ELEMENT
(7) ASTER - 20 SF @ 22" O.C.
(16) BEEBALM - 53 SF @ 22" O.C.
(11) FROSTWEED WINGSTEM - 36 SF @ 22" O.C.
(5) PURPLE CONE FLOWER - 13 SF @ 22" O.C.
(30) BUTTERFLY WEED - 90 SF @ 22" O.C.
(25) GOLDENROD - 72 SF @ 22" O.C.
(15) PERENNIAL SUNFLOWER - 50 SF @ 22" O.C.
(9) GAYFEATHER - 36 SF @ 22" O.C.
(1) CHINQUAPIN
(15) INDIAN PINK - 40 SF @ 22" O.C.
SHIFT EXISTING SIGNAGE
(1) BEAR GRASS
(1) AMERICAN HOLLY
(47) PERENNIALS - 105 SF @ 18" O.C.
(1) YAUPON HOLLY
(8) MOUNTAIN AZALEA & (8) FLORIDA AZALEA @ 42" O.C.
(2) CLIMBING ASTER & (2) CORAL HONEYSUCKLE
(3) MOUNTAIN AZALEA @ 42" O.C.
(25) PERENNIALS - 78 SF @ 18" O.C.
(1) AMERICAN HOLLY
(3) VIRGINIA SWEETSPIRE @ 4' O.C.
(5) BLUEBERRY MIX- 45 SF @ 3' O.C.
(23) PERENNIALS - 87 SF @ 24" O.C.
(1) BEAR GRASS
(3) 'AUTUMN BRILLIANCE' SERVICEBERRY @ 15' O.C.
(3) AMERICAN SNOWBELL @ 5' O.C.
(8) RED BUCKEYE TO BE POSITIONED BY L.A. @ 4' O.C.
(1) YAUPON HOLLY
HARDWOOD MULCH - ALL PLANTING AREAS

NOTES:
1. OVERALL SITE MAP DERIVED FROM BINGMAPS AERIALS 2012; LIBERTY COUNTY ARCGIS FLEX VIEWER (2007-2011), AND GOOGLE EARTH AERIALS 2012.
2. BASE, ENVIRONMENTAL, AND CONFIDTIAL DATA INVENTORY BY VERDANT ENTERPRISES, SITE VISIT CONDUCTED: 1 OCTOBER 2012, 12 OCT 12, 6 JAN 2015
3. ADDITIONAL SURVEY DATA PRODUCED BY EHC ENGINEERING SERVICES, INC ON 28 JANUARY 2015. PDF RECEIVED 6 FEB 2015, AUTOCAD FILE RECEIVED: 23 FEB 2015, 9 MARCH 2015, SPOT ELEVATIONS DIGITIZED BY VERDANT ENTERPRISES ON 27 MAY, 2015
4. JD LINE PRODUCED BY JIM RENNER ON 21 JANUARY 2015, PDF RECEIVED 23 JANUARY 2015
5. PROPERTY LINE PRODUCED BY SONNY EMMERT ON 23 FEBRUARY, 2015. PDF RECEIVED 24 FEBRUARY 2015, DIGITIZED BY VERDANT ENTERPRISES ON 26 MAY 2015;

EXISTING ECOLOGY NOTE:
EXISTING ECOLOGY AND AESTHETICS WILL OFTEN CAUSE ADJUSTMENTS OF THESE PLANS TO FIT SITE. STAKE OUT BY THE CONTRACTOR AND ADJUSTMENT BY THE LANDSCAPE ARCHITECT IS ABSOLUTELY NECESSARY.

CAY CREEK WETLANDS INTERPRETIVE CENTER
CHARLIE BUTLER RD. • MIDWAY, GEORGIA

SCALE: 1" = 10'-0"
10 MAY 2017
REVISED: 18 MAY 2017
DESIGNED BY: TA
DRAWN BY: JH
REVIEWED BY: TA

SHEET NUMBER 3 OF 3

VERDANT ENTERPRISES LLC • SAVANNAH, GEORGIA
ENVIRONMENTAL DESIGN • LANDSCAPE ARCHITECTURE • SITE PLANNING

PLANTING PLAN

Phase I: Wetland & Swale Garden

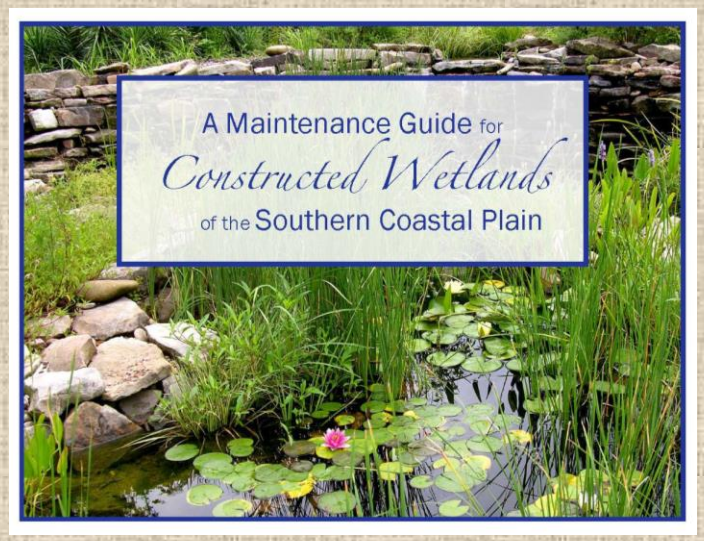
Lessons Learned:
Adapting to a Changing Climate

Phase II: Upland Garden

Creative Stormwater & Native Plants

Community Involvement

Education & Outreach



Interpretive Signage

Partnerships

- **City of Midway**
- **Coastal WildScapes**
- **National Fish & Wildlife Foundation:** 5 Star Grant
- **A Southern Company:** 5 Star Grant
- **USDA Natural Resources Conservation Service:** Conservation Innovation Grant (CIG)
- **Verdant Enterprises, LLC**

Visit Cay Creek

- EXIT 76 OFF I-95
- HEAD WEST ON US-84/ COLONALS ISLAND ROAD/GA 38 FOR APPROXIMATELY 1 MILE
- TURN LEFT (SOUTH) ON CHARLIE BUTLER ROAD
- ENTRANCE IS .2 MILES DOWN ON LEFT

COORDINATES: 31°47'7.02"N, 81°23'41.53"W

Coastal WildScapes

Native Plants for Pollinators

Amy Schuler & Christa Hayes

Why Natives?

- Support pollinators
- Provide aesthetics
- Reduces pesticide & fertilizer use
- Requires less water
- Provides wildlife habitat
- Increases biodiversity
- Brings nature home!

Species Abundance

20,000 butterfly species worldwide

750 in North America north of Mexico

172 in Georgia

116 in coastal Georgia

Beyond Butterfly Gardening





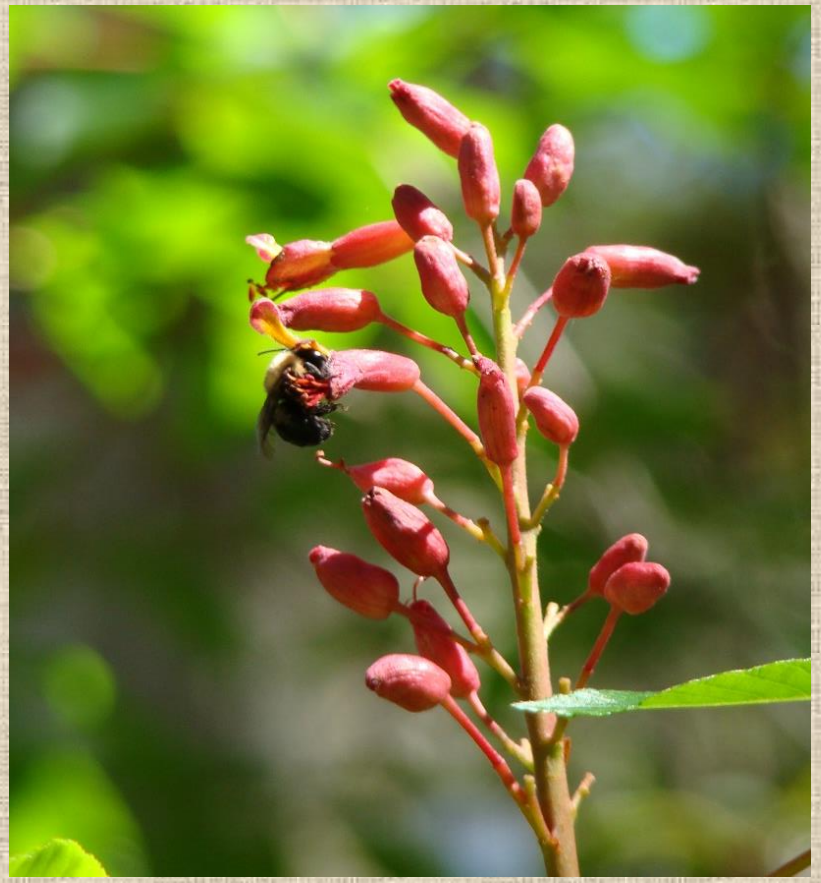



Pollinator Gardens

Seasonality of Bloom

Spring Blooming

Red Buckeye: Nectar Plant



Carolina Satyr on Paw Paw

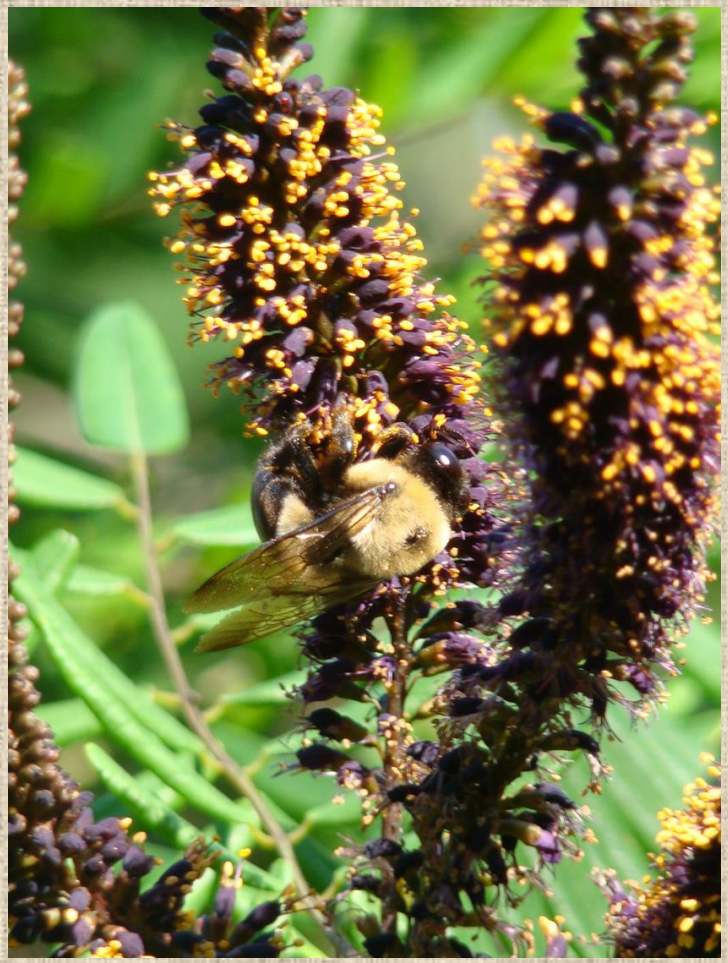
Violet
Host Plant for Variegated Fritillary

Sassafras
Host Plant for Spicebush Swallowtail

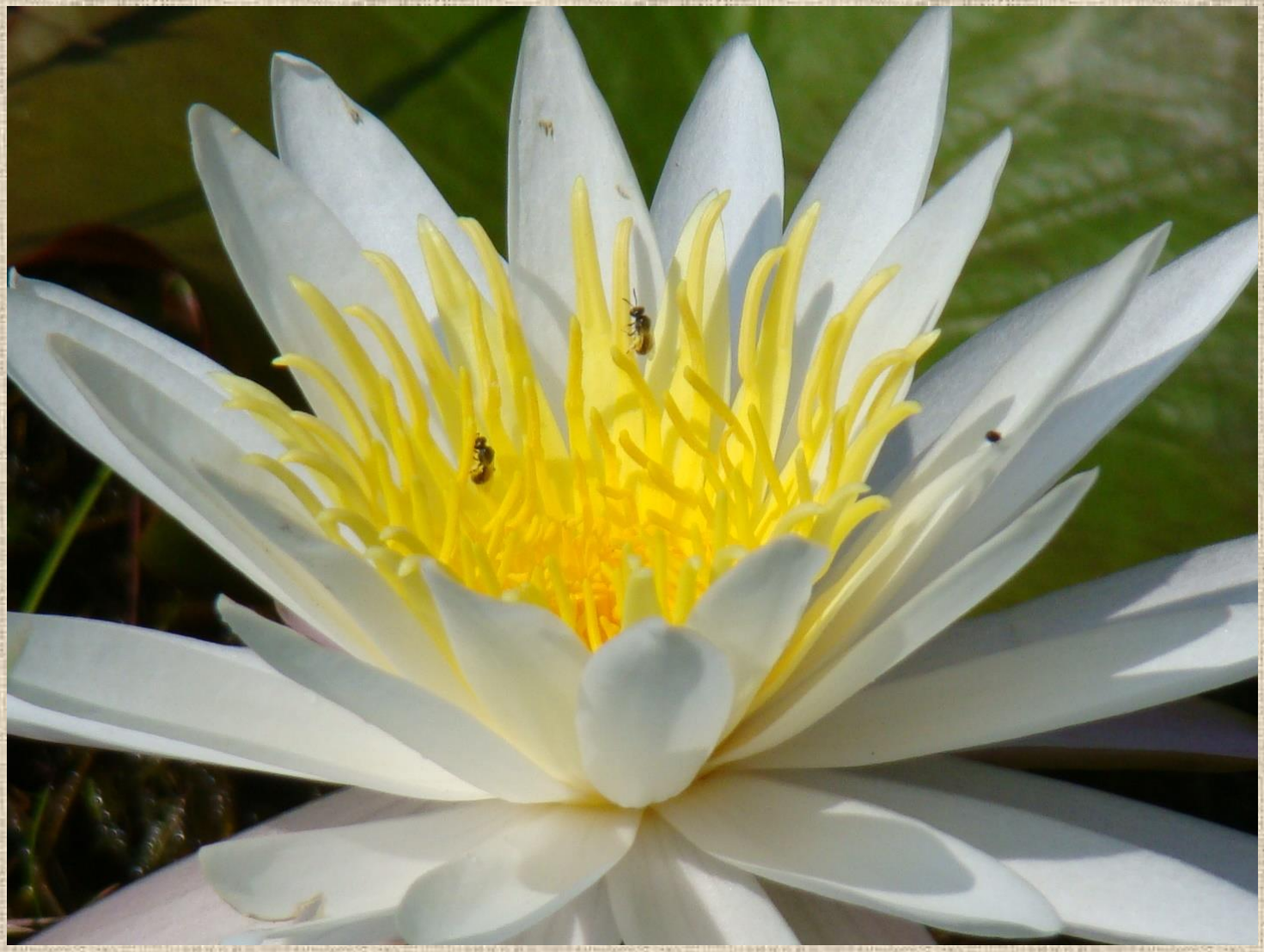
Lace Wing Roadside Skipper on Blue Flag Iris

Hickory
Host Plant for Banded Hairstreak

Monarch on False Indigo Bush



Water Lily: Nectar Plant



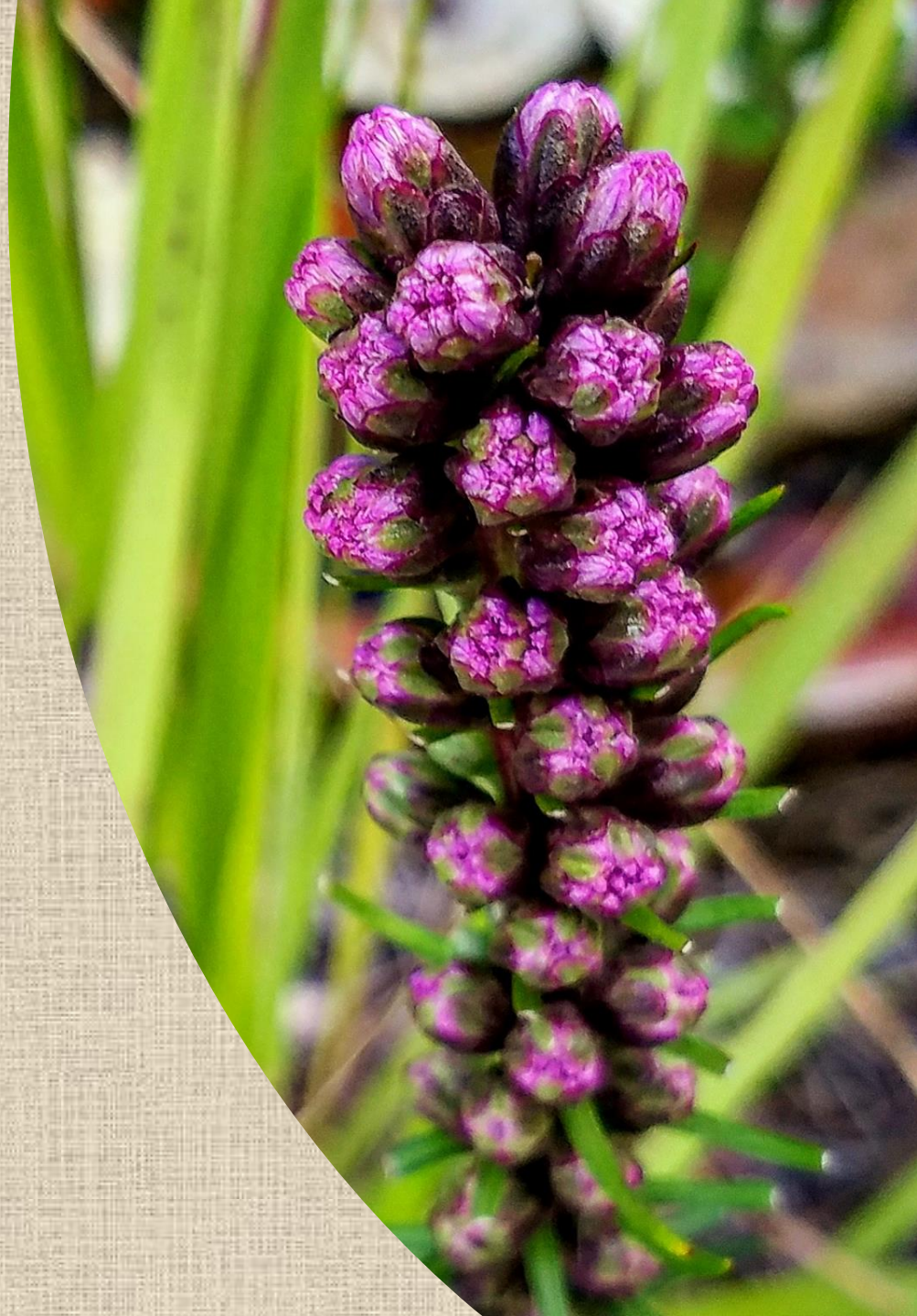
Monarch on Toothache Tree

Southern Oak Hairstreak & Zebra Swallowtail on Sparkleberry

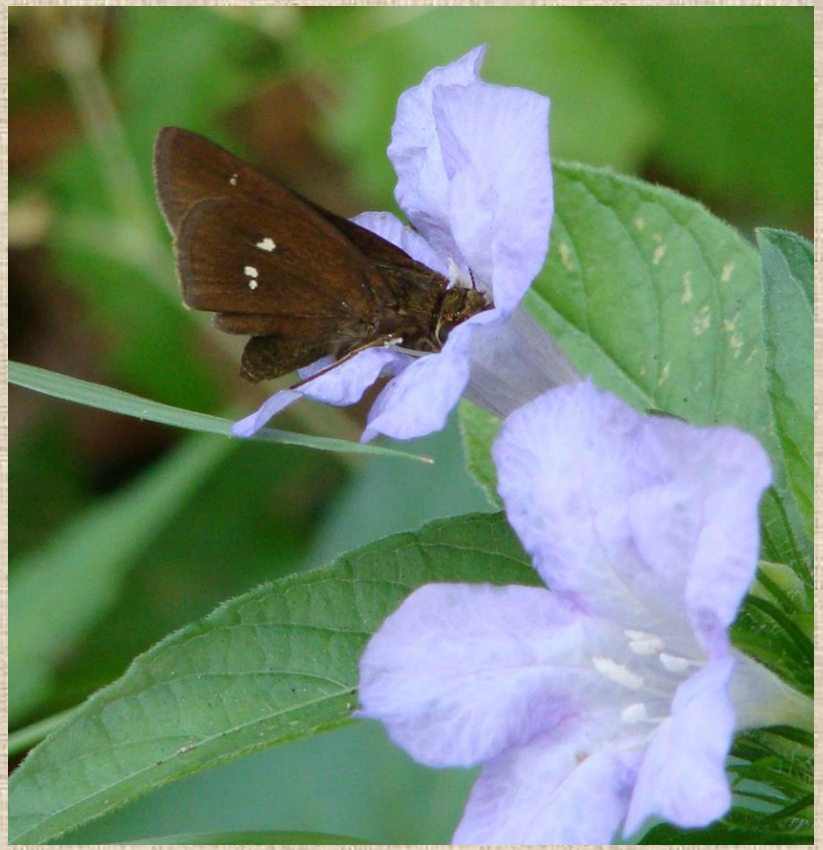
Sweetleaf
Host Plant for King's Hairstreak

Hawthorne
Host Plant for Striped Hairstreak

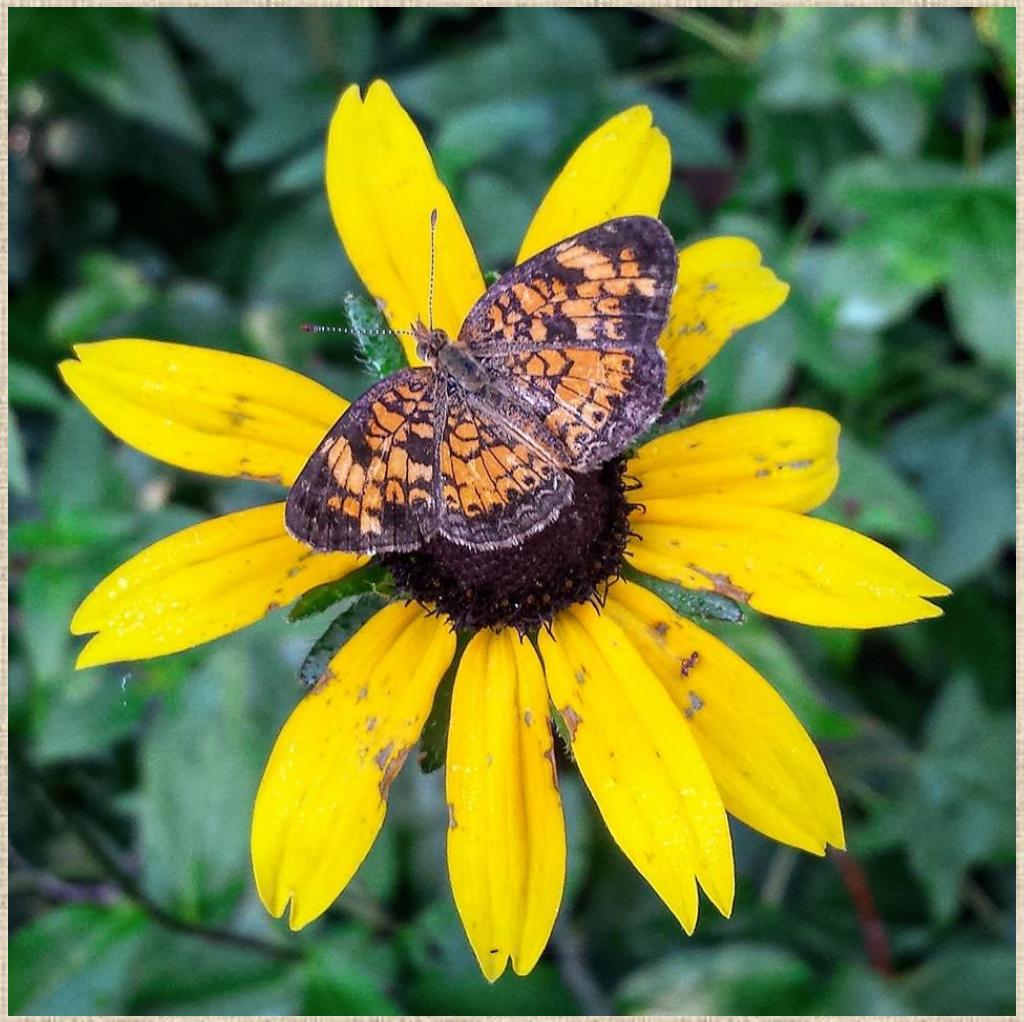
Summer Blooming



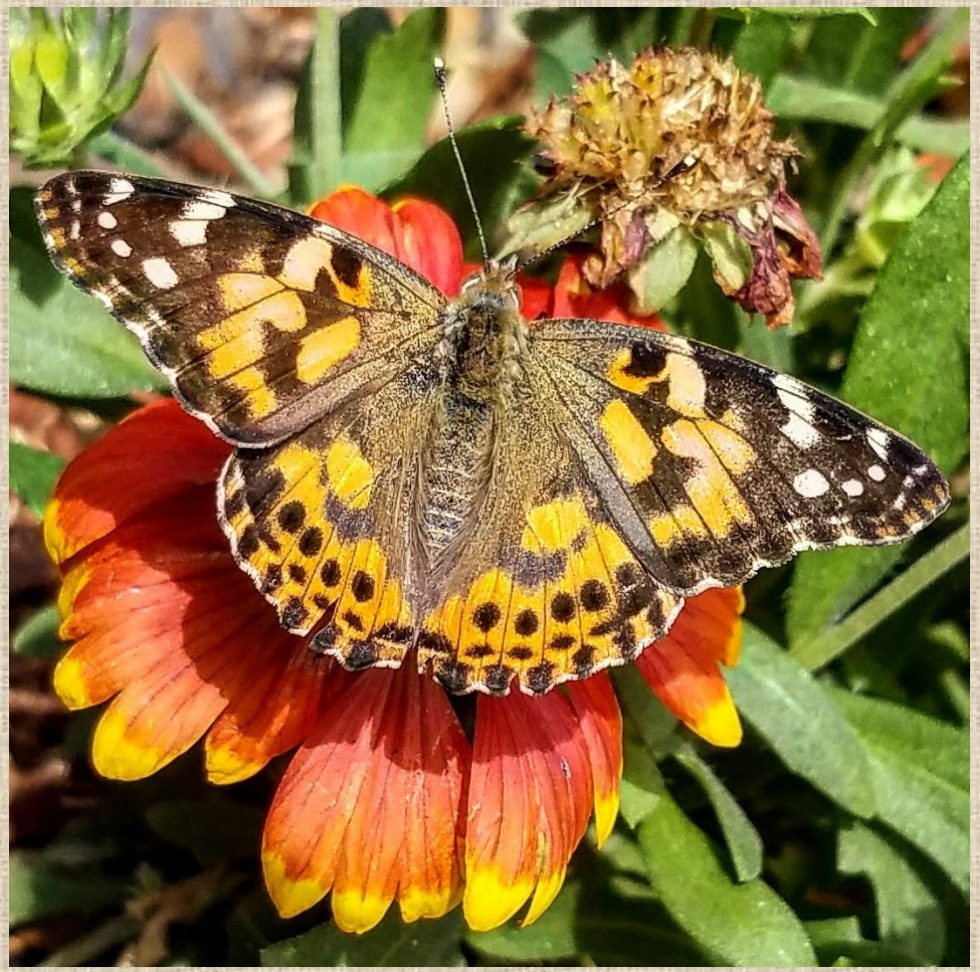
Twin-spot Skipper on Wild Petunia



Pearl Crescent on Black-eyed Susan



Painted Lady on Blanketflower

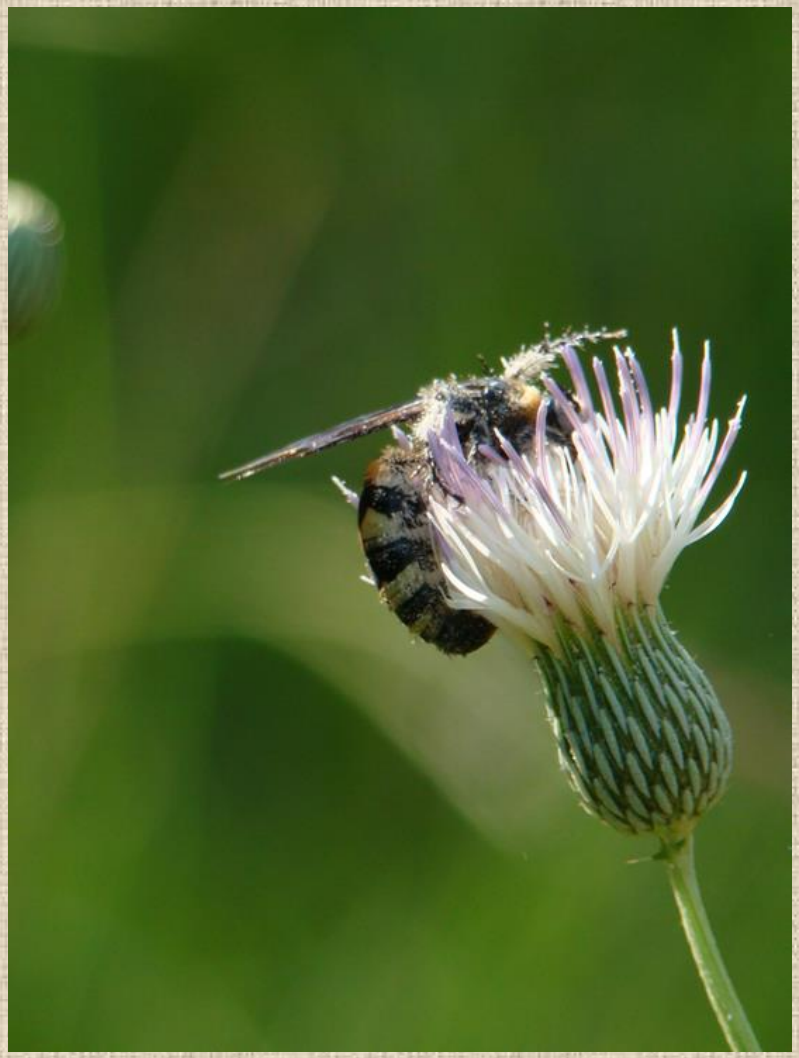


False Foxglove
Host Plant for Common Buckeye

Lupine: Nectar Plant

Great Purple Hairstreak, Ceraunus Blue, & Varigated Fritillary on Sweetscent

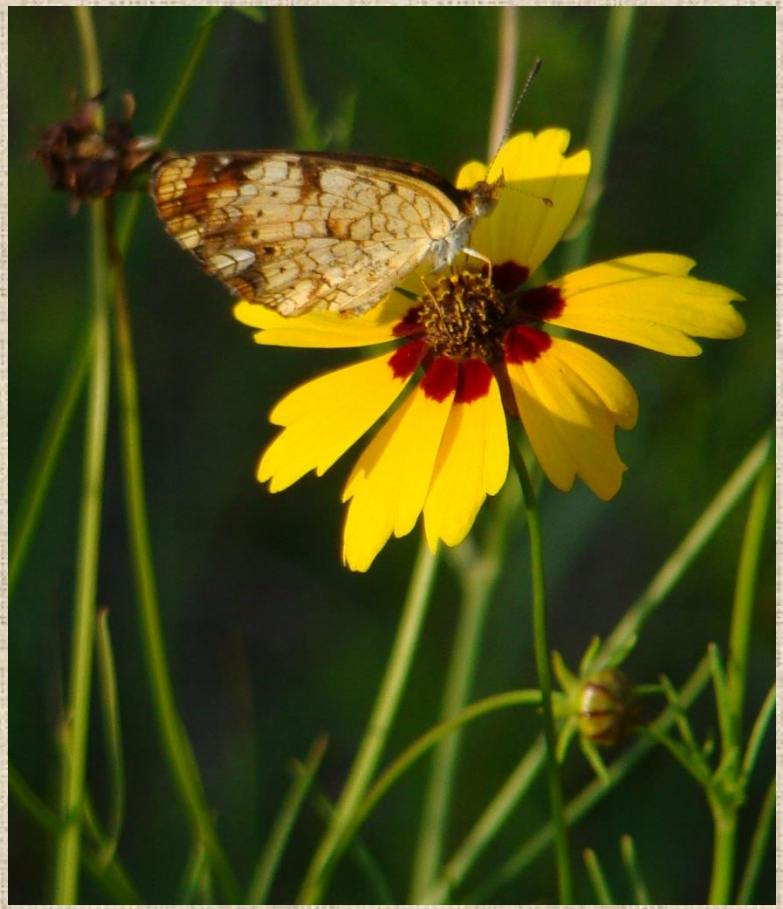
Thistle: Nectar Plant



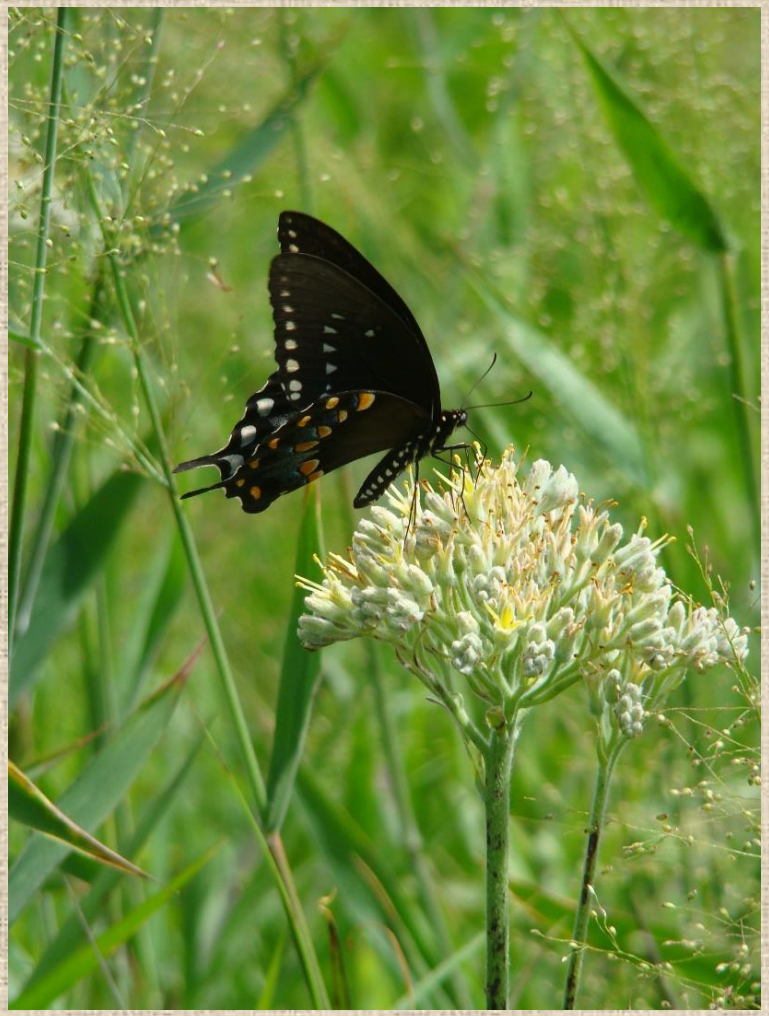
Eastern Tiger Swallowtail & Common Buckeye on Blazingstar

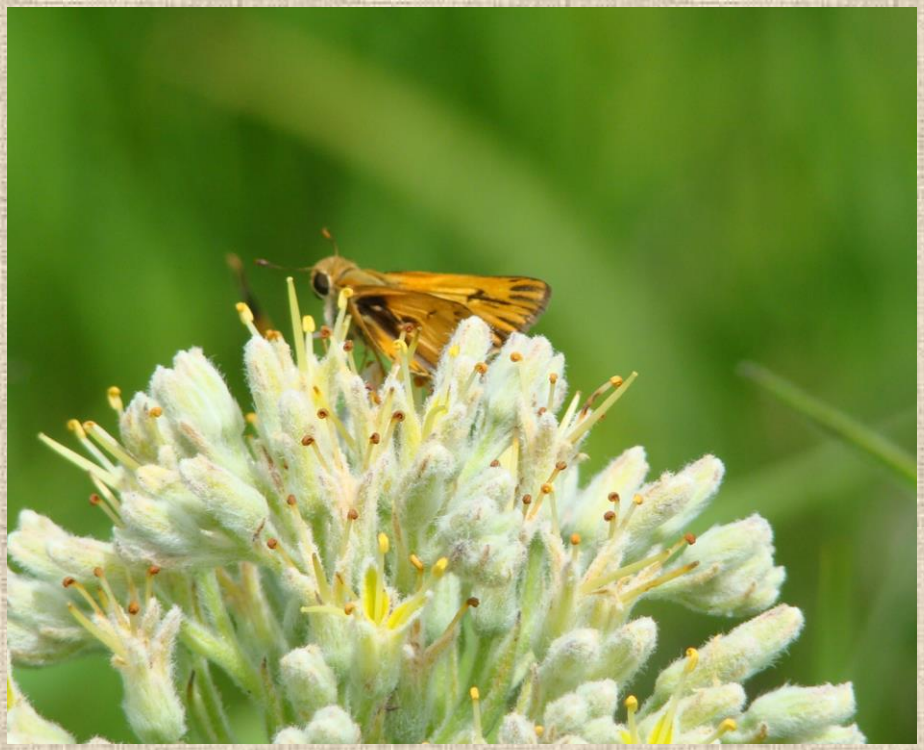
Henry's Elfin & Holly Azure on Yaupon Holly

Swarthy Skipper & Pearl Crescent on Coreopsis

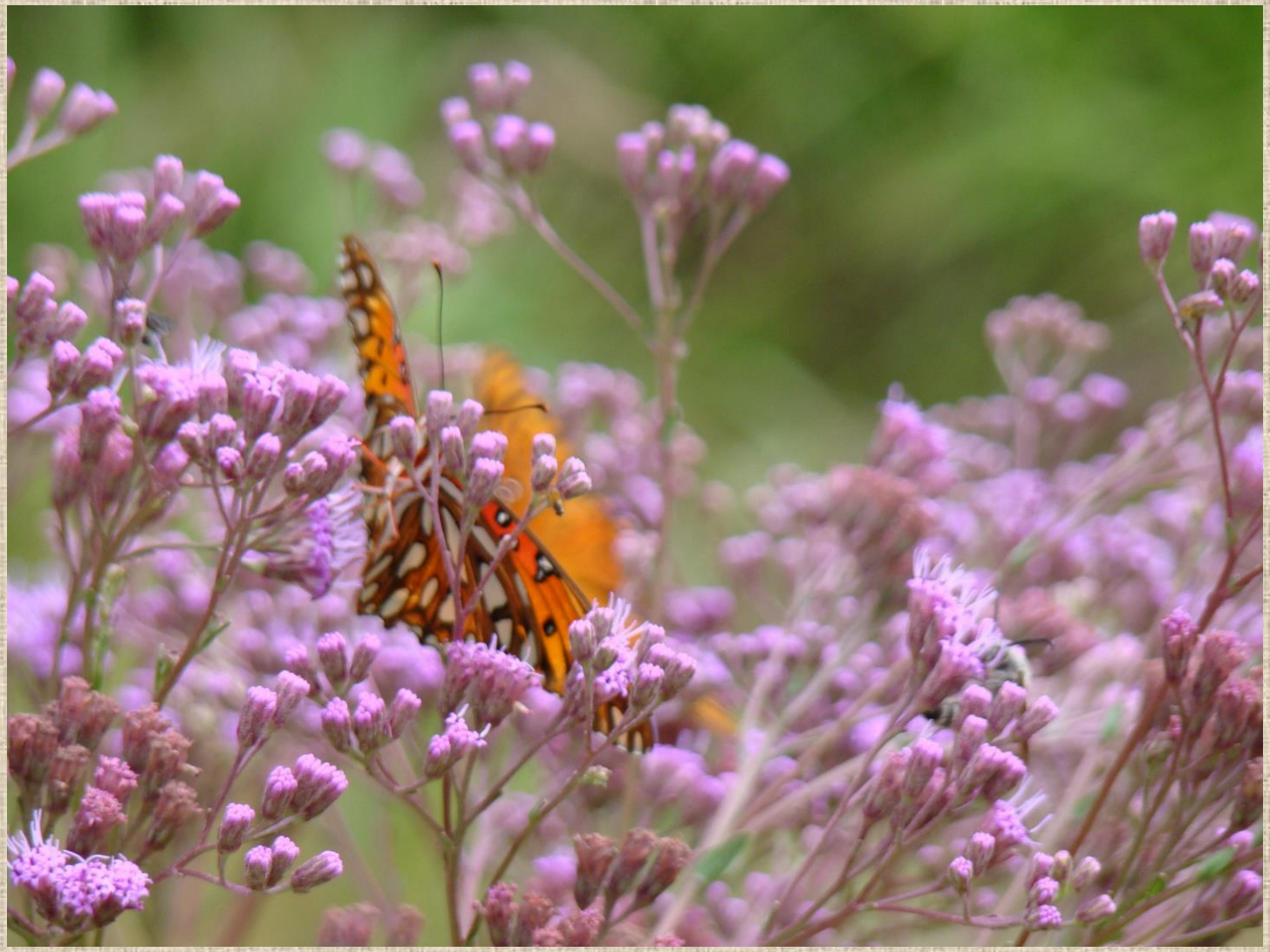


Spicebush Swallowtail & Fiery Skipper on Redroot

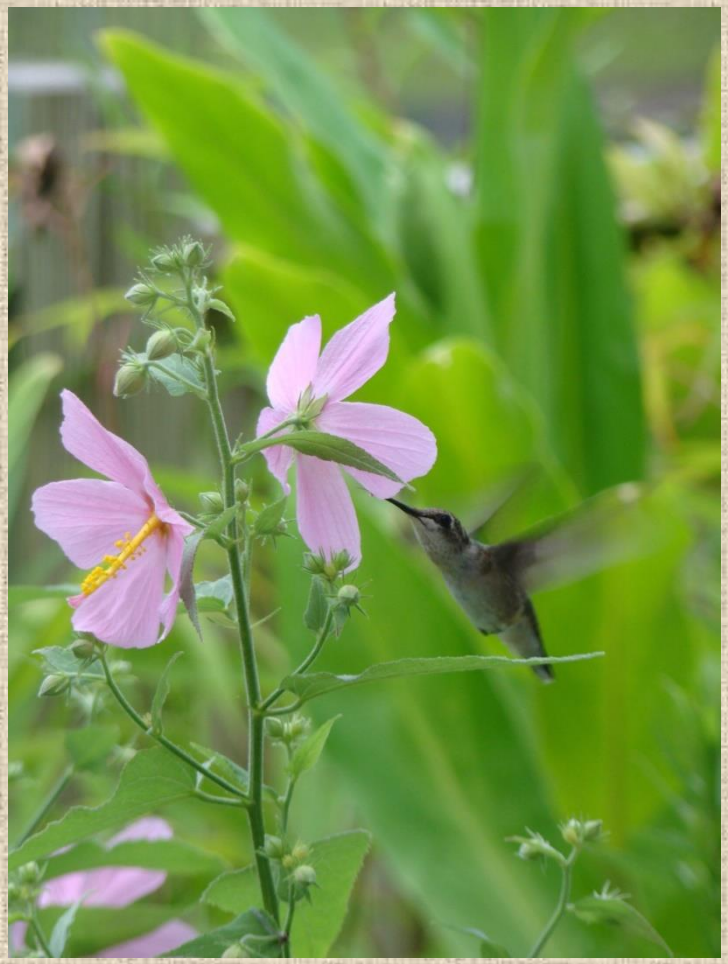


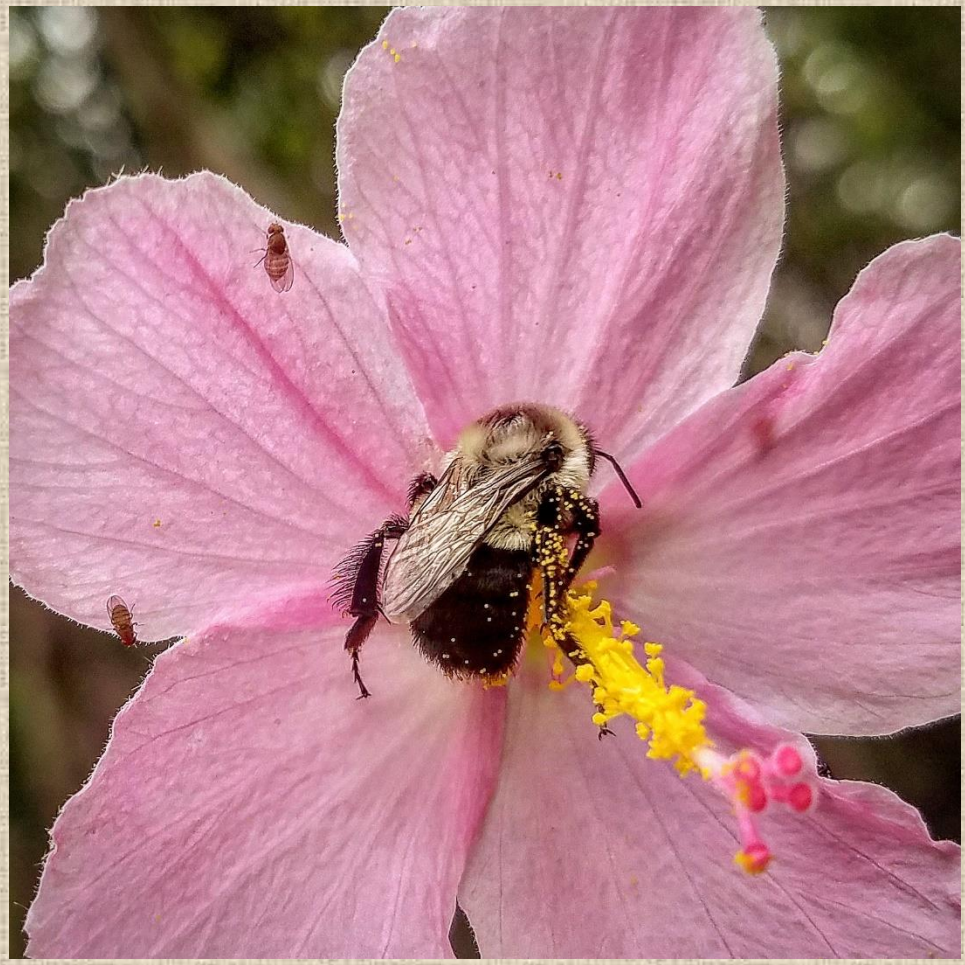


Gulf Fritillary on Vanillaleaf



Seashore Mallow with Ruby-throated Hummingbird





Hibiscus as Nectar Plant

Sandhill Milkweed with Monarch Caterpillar Host Plant for Monarch & Queen

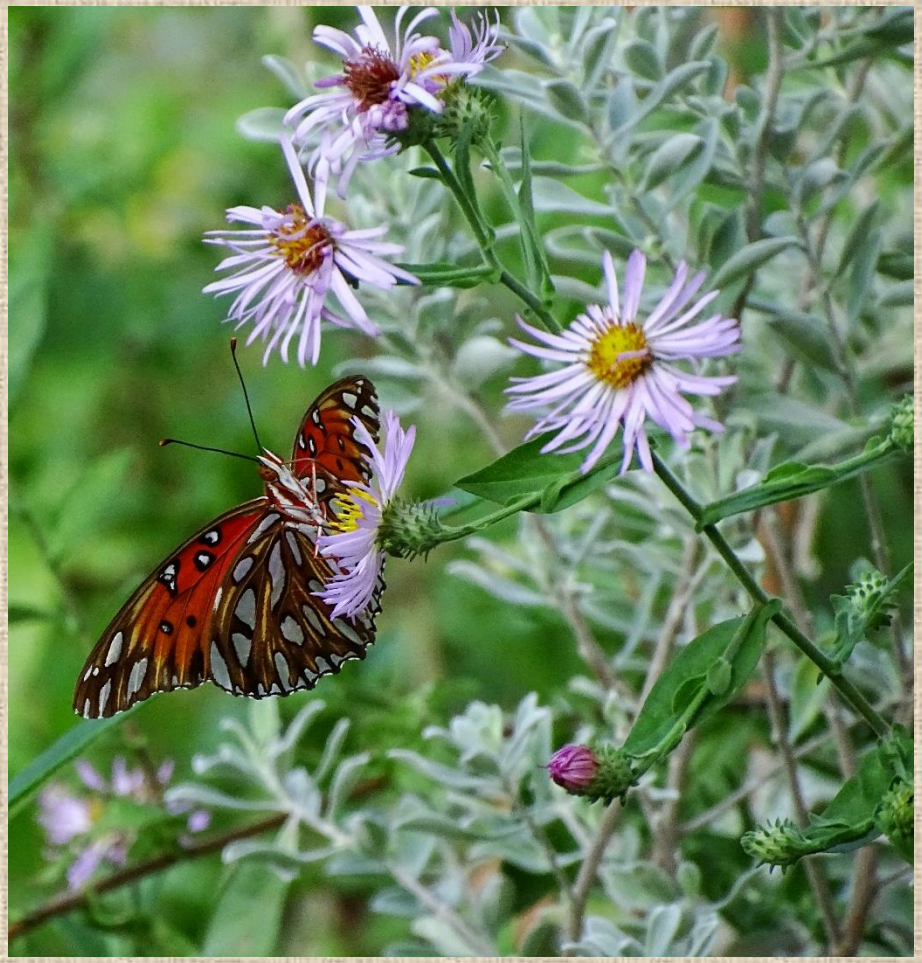
Milkweed: Nectar Plant

Zebra Longwing on Scarlet Sage

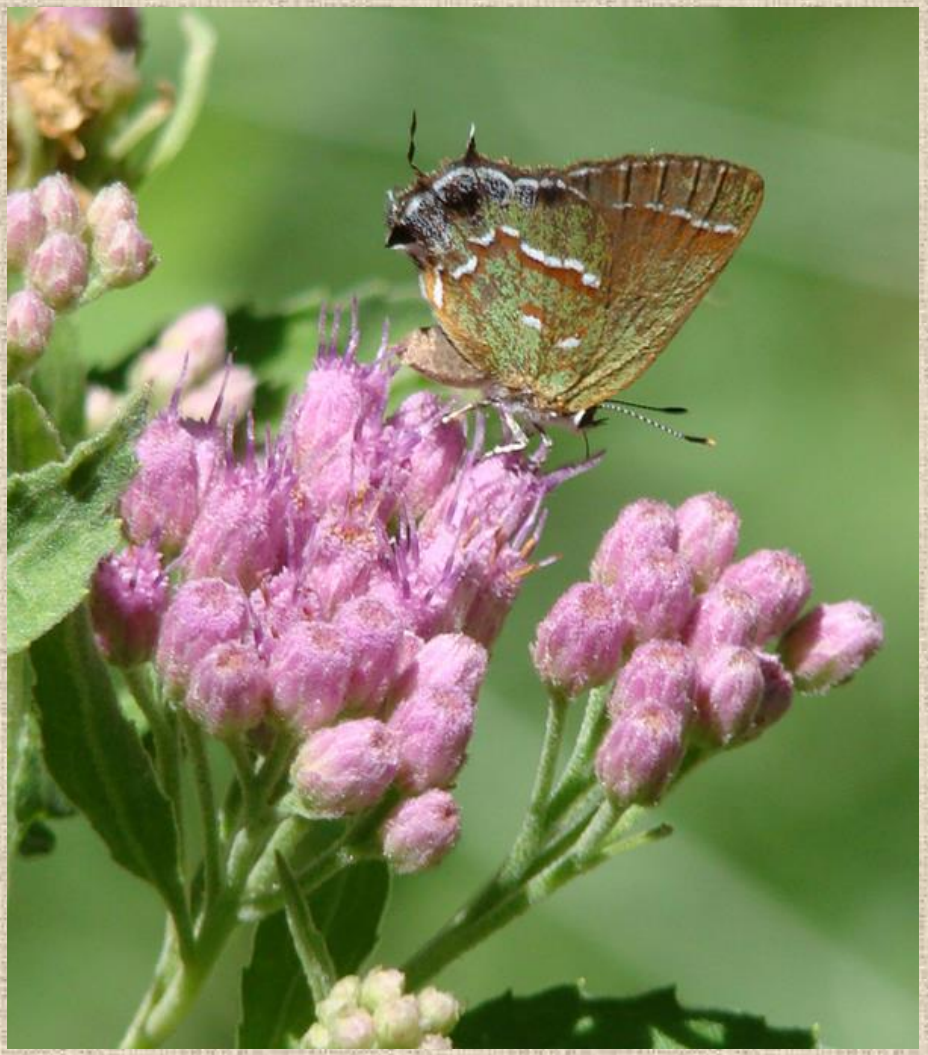
Passionflower
Host plant for Zebra Longwing & Gulf Fritillary

Fall Blooming

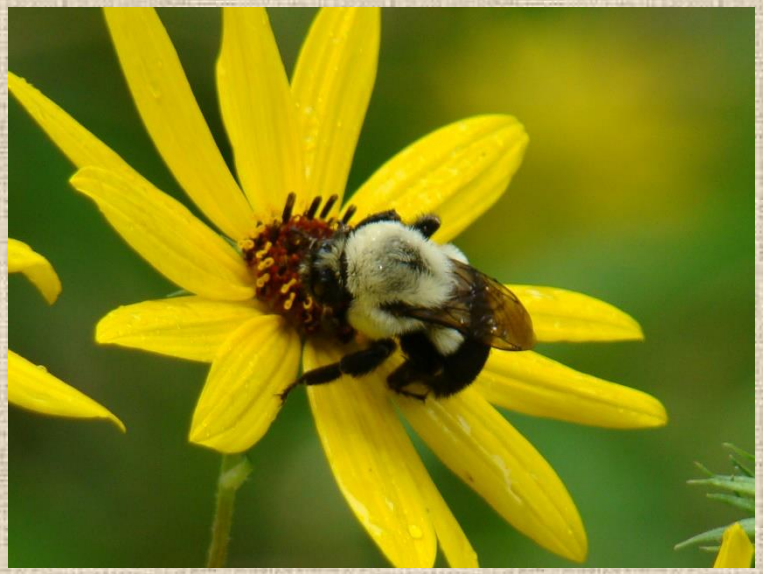
Gulf Fritillary on Climbing Aster



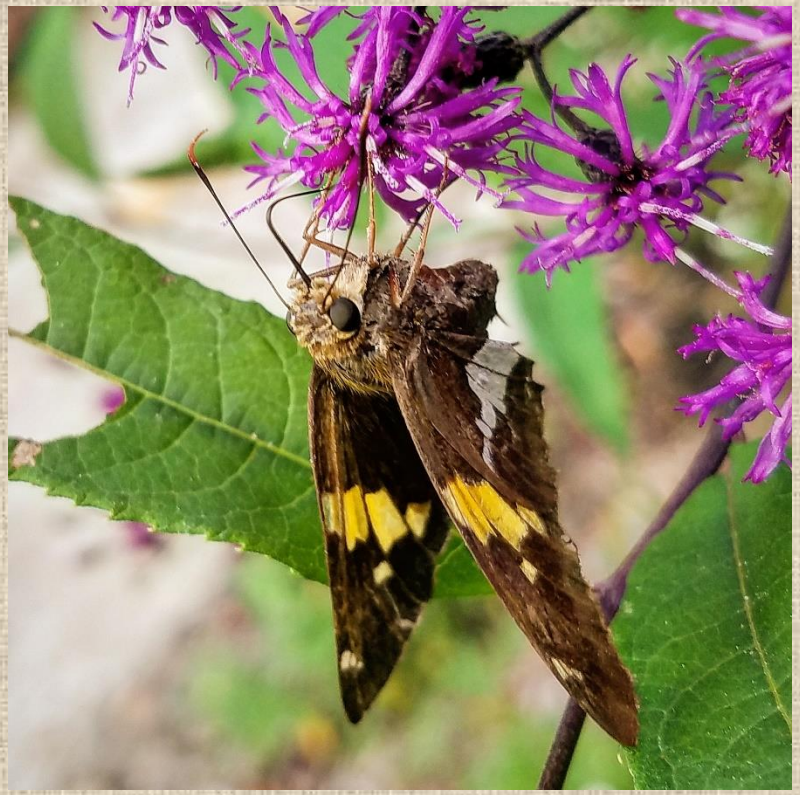
Monarch on Juniper
Sweadner's Hairstreak (Juniper Obligate)



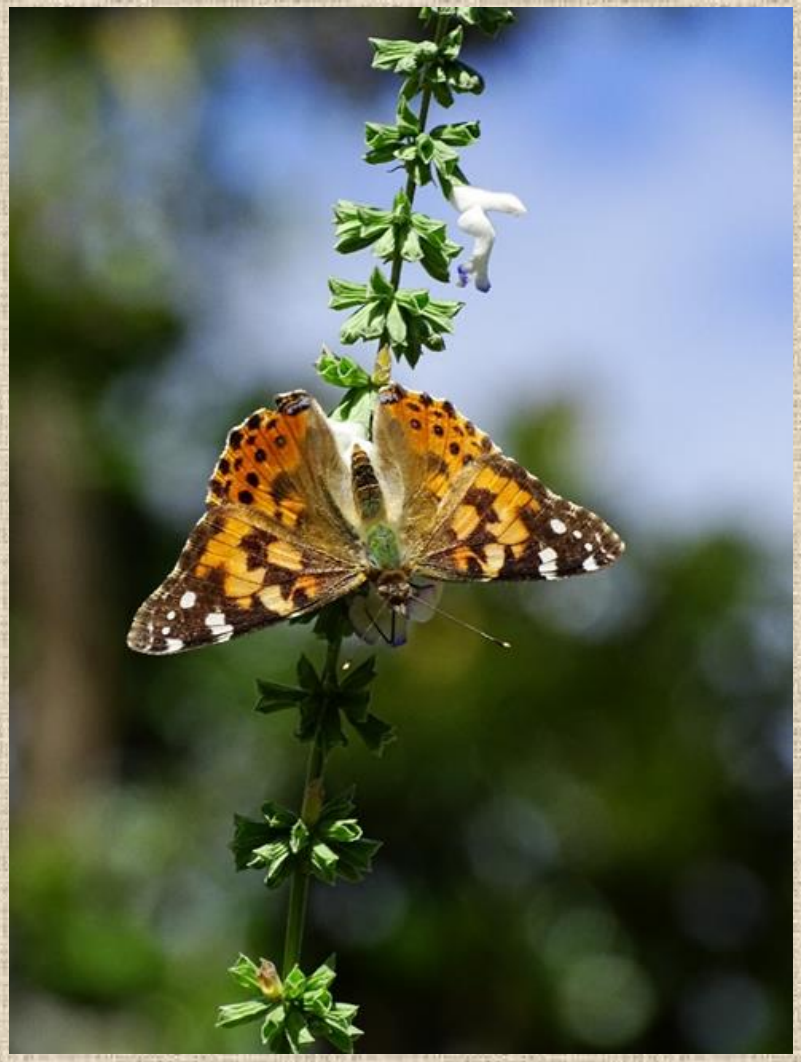
Tropical Checkered Skipper on Swamp Sunflower

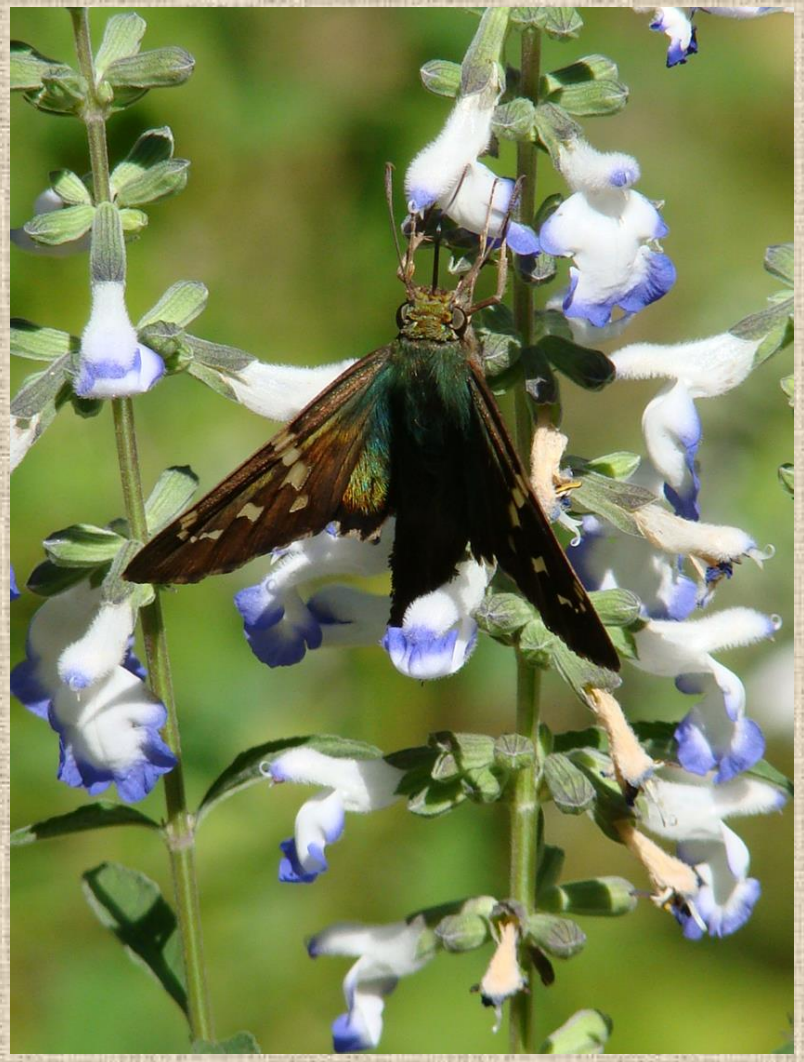


Silver Spotted Skipper & Gulf Fritillary on Ironweed

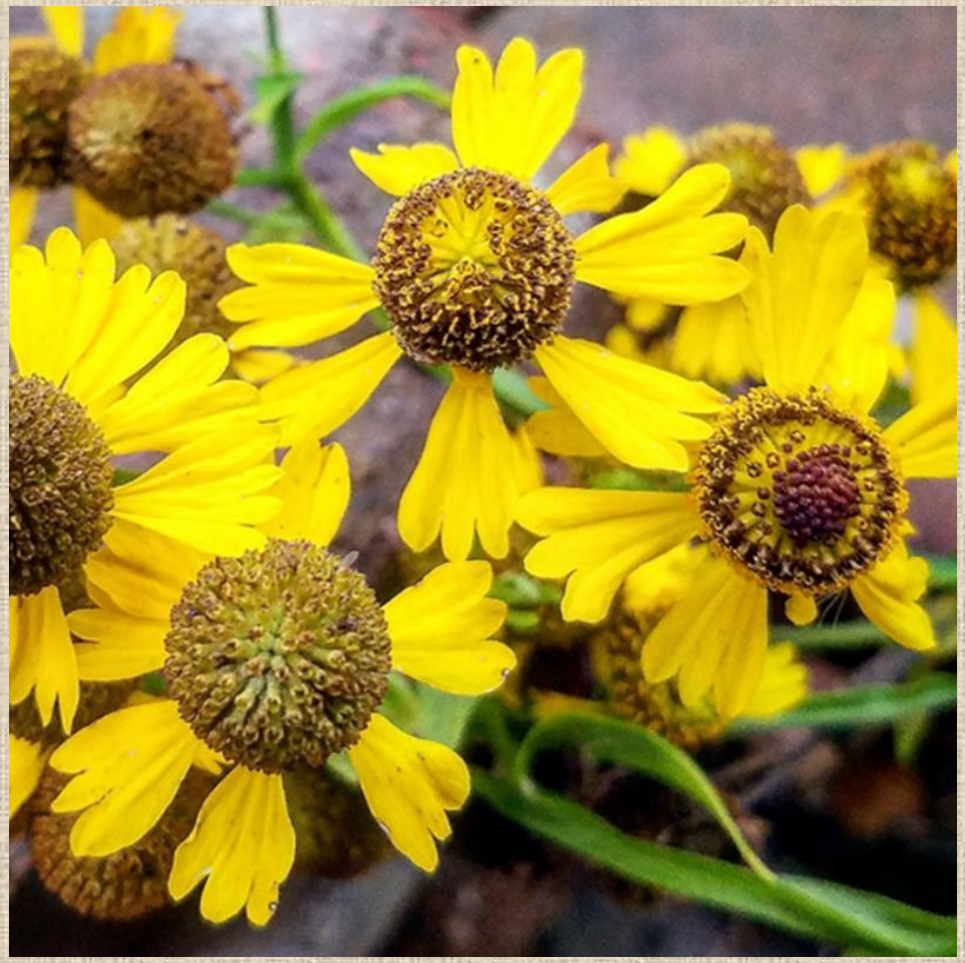


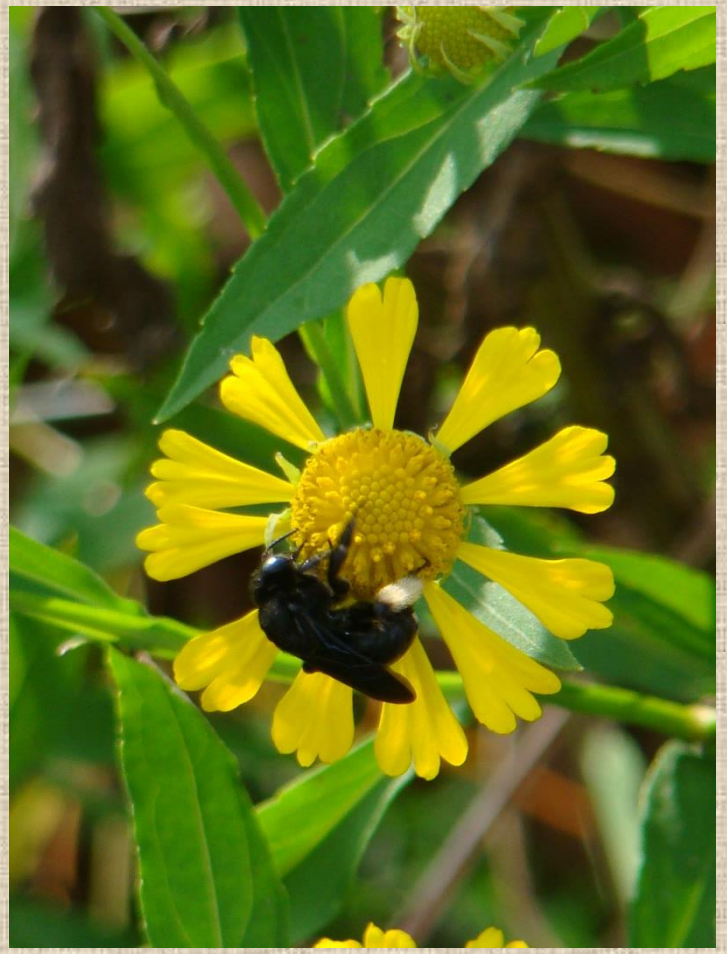
Painted Lady & Long-tailed Skipper on Blue Sage





Sneezeweed: Nectar Plant





Abstain from Leaf Blowers

- **Natural ground cover** (leaves, topsoil, and mulch) protects, nourishes, & provides moisture to plants and animals, including important pollinators.
- Butterflies & insects need leaves for their habitats.
- Bumblebees nest in soil or piles of dead leaves.

Species Impacted by Leaf Blowers

- Fall – local populations, migrants
- Winter Time
- Early Spring

Neonicotinoids in Your Garden

Acetamiprid
Clothianidin
Imidacloprid
Nitenpyram
Nithiazine
Thiacloprid
Thiamethoxam

Reduce Neonicotinoids

Seaside Goldenrod

Solidago sempervirens

This plant is resistant to salt, and unlike other goldenrod, does not spread by rhizomes. Flowers are golden yellow on slender, arching stalks, and are a primary food source for migrating monarchs. Leaves are evergreen, sticking around through winter. Contrary to the common misconception, it is ragweed not goldenrods that cause allergies. An early summer pruning will cause the stems to branch and give a bushier habit.

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec

Flowering Time

Coastal WildScapes

presents

Pollinator Habitat Grants

Sponsored by

U.S. Fish & Wildlife Service

$1,000 Grant

Any Questions?!