



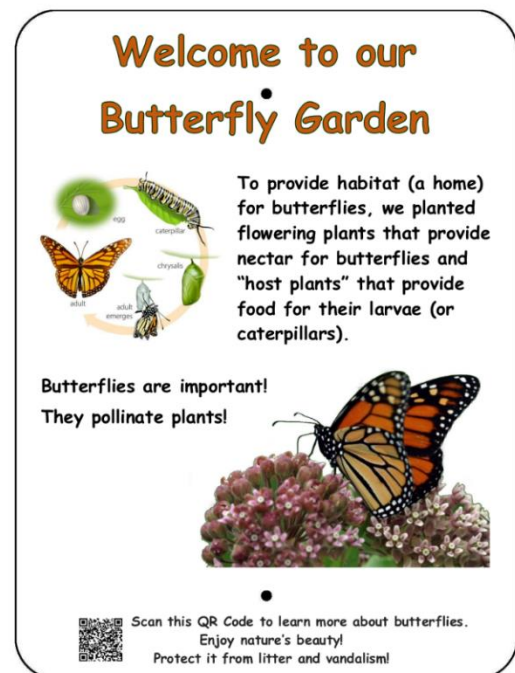
Outdoor Classroom Project Plan: Materials List & Budget for Butterfly, Butterfly Garden

A Butterfly Habitat should provide food, water, and shelter for a wide variety of butterflies and their larvae (or caterpillars). Butterflies will most often search flowering wildflowers, bushes, and trees for their main food source (nectar) using their tube-like “tongues” called a proboscis. However, some species will acquire the minerals and nutrients that they need by probing the ground around decomposing plants or animals or around animal excrement with their proboscises. Nectar, shallow puddles, and drops of rain or dew provide the water that butterflies need to survive. Different species of butterflies only lay their eggs on specific species of plants (referred to as “host plants”) and the caterpillars will only eat these plants before creating a chrysalis to go through metamorphosis into an adult butterfly. Butterflies typically take refuge from inclement weather or predators in bushes or trees.

❖ Habitat Requirements:

- Native flowering wildflowers, bushes, and trees that produce nectar
- Native “host plants” that caterpillars eat (*see list on page 3 and 4*)
- Puddling stations for butterflies that prefer to get their nutrition from excrement covered in sand
- Bushes and trees for cover from inclement weather and predators
- Dark colored stones where butterflies can warm their bodies
- Full sun for 6-8 hours per day for optimal plant growth

❖ Example Butterfly, Butterfly Garden Pictures & Educational Sign:





OC Project Plan: Example Butterfly, Butterfly Garden Materials List & Budget

❖ **Estimated Cost:** \$1,140 – \$1,190

❖ **Materials & Supplies with Estimated Budget:**

Example Butterfly, Butterfly Garden				
4 individual “wing gardens” (~35 CF planting space total) with mulch “body bed” in between them. Notes made in budget for how to modify if you will use a sidewalk as your “body”.				
Station	Materials & Supplies	Estimated Cost	Example Source	Final Cost
Bttrfly, Bttrfly	(1) Can of Rust-Oleum Professional White Water-based Marking Paint @ ~\$10.98 ea	\$10	Lowe’s Item# 429750	
Bttrfly, Bttrfly	(160) 11-in L x 4-in H x 6-in D Flagstone Concrete Retaining Wall Blocks (trapezoid-shaped to create rounded parts of wings) @ ~\$2.88 ea	\$460 total	Lowe’s Item# 477095	
Bttrfly, Bttrfly	(1) EasyFlex No-Dig 20-ft Black Plastic Landscape Edging Roll (for rounded ends of butterfly body) <i>*Exclude this if you are using a sidewalk as the body.</i> ~\$18.98 ea	\$20	Lowe’s Item# 1501486	
Bttrfly, Bttrfly	(8) 32-Quart (1CF) Bags of Evergreen Organic Potting Soil Mix @~\$6.38 ea	\$50 total	Lowe’s Item# 380608	
Bttrfly, Bttrfly	(14) 1 CF/32 Qt Bags of Evergreen Organic Top Soil @ ~\$2.18 ea	\$30 total	Lowe’s Item# 648834	
Bttrfly, Bttrfly	(11) 1 CF Bags of Evergreen Organic Compost and Manure @~\$3.68 ea (3 for garden, 1 per bush, 2 per tree)	\$40 total	Lowe’s Item# 757958	
Bttrfly, Bttrfly	(5) 2 CF Bag of Evergreen Organic Drainage and Aeration Soil Conditioner @ ~\$4.58 ea	\$25 total	Lowe’s Item# 648829	
Bttrfly, Bttrfly	(1) Package of 40 6” Black Plastic Landscape Edging Pieces (create (2-4) 4 ft dividers) @ ~\$21.98 ea	\$20	Lowe’s Item# 379805	
Bttrfly, Bttrfly	(6) 2 CF Bags of Evergreen Natural Dark Brown Pine Bark Mulch (2 for garden, rest for trees/bushes) @~\$3.48 ea **do NOT get black mulch as it gets hot and kills plants**	\$20 total	Lowe’s Item# 92118	
Bttrfly, Bttrfly	(2) Premium 2CF Black Hardwood Mulch (for body) <i>*Exclude this if you are using a sidewalk as the body.</i> @ ~\$3.98 ea	\$10 total	Lowe’s Item# 148349	
Bttrfly, Bttrfly	(1) 6’x50’ Sta-Green Professional Landscape Fabric (weed barrier) (for gardens and body, only) @ ~\$33.98 ea	\$35	Lowe’s Item# 510606	
Bttrfly, Bttrfly	(1) Black Steel Garden Trellis (ONLY IF you get passionflower vines) @~\$16.48 ea	\$0-15	Lowe’s Item# 397037	
Bttrfly, Bttrfly	(10) Belgard Overlay Paver 7.75-in L x 3.88-in W x 1.18-in H River Street Concrete Paver (for antennae) @~\$0.58 ea	\$5 total	Lowe’s Item# 3276557	





OC Project Plan: Example Butterfly, Butterfly Garden Materials List & Budget

❖ Materials & Supplies with Estimated Budget (cont.):

Bttrfly, Bttrfly	(40) Host/ Nectar Plants from Nursery – see suggestions below (5” pots) @ ~\$7 ea	\$280 total	Nursery via OC Consultant	
Bttrfly, Bttrfly	(2) Native Oaks, Dogwoods, or Tulip Poplars (*Optional - plant in or near OC as host plants & cover) @~\$75 ea	\$150 total	Nursery via OC Consultant	
Bttrfly, Bttrfly	(2) Spicebushes or (2) Wax Myrtles (*Optional - plant as host plants near garden in OC if possible) @~\$30 ea	\$60 total	Nursery via OC Consultant	
Bttrfly, Bttrfly	(2) Sweet Pepperbushes or (2) Butterfly Bushes (plant as nectar plants near garden) @~\$30 ea	\$60 total	Nursery via OC Consultant	
Bttrfly, Bttrfly	(2) 12.2-in Terracotta Clay Plant Saucer (to create puddling stations) @~\$14.48 ea	\$30 total	Lowe’s Item# 94459	
Bttrfly, Bttrfly	(1) .5 CF/50 Lb Bags of American Countryside All-purpose Sand (to create puddling stations) @ ~\$5.18 ea	\$5 total	Lowe’s Item# 104898	
Bttrfly, Bttrfly	(4-8) Plant ID Signs (one for each plant species) @~\$6 ea	\$25-50 total	https://www.alabamawildlife.org/oc-dig-into-plants/ for details	
Bttrfly, Bttrfly	(4-8) Biomarkers to hold Plant ID signs (13” stake with a 2” x 4” plate) @ ~\$3 ea (includes S&H)	\$15 - \$25 total	AWF OC Consultant or https://mcgbiomarkers.com/shop/	
Bttrfly, Bttrfly	(1) 6 ft. U-Post for Fence (for educational sign) @~\$10.69 ea	\$10	Lowe’s Item# 493054	
Bttrfly, Bttrfly	Educational Sign (for the life cycle of butterflies)	\$75	Ask OC Consultant About https://www.alabamawildlife.org/oc-signs/	
Bttrfly, Bttrfly	(1) Hillman 1/4-in x 1-1/2-in Zinc-Plated Coarse Thread Hex Bolt (2-Count) @~\$0.88 ea	\$5 total	Lowe’s Item# 137634	
Bttrfly, Bttrfly	(2) Hillman 1/4-in x 20 Zinc-Plated Steel Hex Nut @~\$0.10 ea		Lowe’s Item# 63301	
Bttrfly, Bttrfly	(2) Hillman 1/4-in Zinc-plated Standard Flat Washer @~\$0.15 ea		Lowe’s Item# 63306	
TOTAL ESTIMATED COST: \$1,440 - \$1,490				

❖ Butterfly Habitat Plant Suggestions:

- ❑ These species are most commonly used in a butterfly garden. View customized plant identification signs with unique QR Codes that you can scan to open plant species’ webpages on AWF’s website. The webpages provide specific information about that plant species including a description of the plant, the ecological benefits that species provides, maintenance tips, and photos of the plant including its leaves, flowers & seeds.





OC Project Plan: Example Butterfly, Butterfly Garden Materials List & Budget

❖ Butterfly Habitat Plant Suggestions continued:

Nectar Plants	Nectar Plants	Nectar Plants	Host Plants for Caterpillars
Bee Balm	Indian Blanket	Narrowleaf Sunflower	Blue False Indigo
Black-eyed Susan	Joe-pye Weed	Purple Coneflower	Bronze Fennel
Cardinal Flower	Lanceleaf Tickseed	Red Sage	Butterfly Milkweed
Dense Blazing Star	Lavender	Rose Vervain	Common Yarrow
Foxglove Beardtongue	Miss Huff Lantana	Stokes Aster	Passionflower

- Visit the Alabama Butterfly Atlas website at <http://alabama.butterflyatlas.usf.edu/> AND see the list below (on page 4) for more plant species suitable for the butterfly garden.

Host Plants and Nectar Plants for Common Alabama Butterflies		
Butterfly Species	Host Plant	Nectar Plant
<u>Swallowtails</u>		
Pipevine Swallowtail	Pipevine	blueberry, blackberry, butterfly weed, butterfly bush, lilac, red bud, verbena
Black Swallowtail	parsley, dill, fennel, Queen Anne's Lace, celery, carrots	red clover, butterfly weed, thistle
Spicebush Swallowtail	spicebush	blueberry, blackberry, butterfly weed, butterfly bush, lilac, red bud, verbena
Giant Swallowtail	trees and shrubs of the citrus family, hop tree, prickly ash, rue	lantana, azalea, bougainvillea, goldenrod, butterfly bush, dianthus
Eastern Tiger Swallowtail	sassafras, wild cherry, sweet bay, tulip tree, birch, ash, cottonwood, willow	wild cherry, butterfly bush, lilac, phlox, dianthus
<u>Brush-footed Butterflies</u>		
Monarch	butterfly weed and other milkweeds	nectar from all milkweeds, lilac, clover, lantana, thistle, goldenrods, blazing stars, coreopsis, butterfly bush, and mints
Painted Lady	thistle, white yarrow, daisy, hollyhock, mallow	aster, cosmos, blazing stars, coreopsis, joe-pye weed, red clover, butterfly bush, zinnia, privet, butterfly weed
Viceroy	willows, poplars, cottonwoods, apple	aster, goldenrod, joe-pye weed, thistle, butterfly weed
Gulf Fritillary	passionflower vine	butterfly weed, black-eyed susan, thistle, verbena, vetch, joe-pye weed, passionflower vine, purple coneflower
Red Admiral	nettle	prefers tree sap and fermenting fruit, but will also nectar at daisy, aster, goldenrod, butterfly bush, red clover, gaillardia
<u>Whites and Sulphurs</u>		
Cabbage White	cabbage, broccoli	mustards, clover, asters, mints



Clouded Sulphur	alphanha, clover	flower nectar of many plants including butterfly bush, cosmos and gallardia
<u>Gossamer-wing Butterflies</u>		
Red-banded Hairstreak	wax myrtle, sumac, oak	yarrow, coreopsis, butterfly weed
Summer Azure	dogwood	most nectar producing flowers
<u>Skippers</u>		
Common Checkered Skipper	globe mallows, mallow, hollyhock	aster, red clover, dianthus
Horace's Duskywing	red oak, willow oak, water oak, white oak	goldenrod, peppermint

❖ **Selecting Your Numbers of Plants:** Diagram shows half of garden with blocks and plants just for simplicity. Middle section (the body) between the wings is filled with mulch or a sidewalk. Plants can be laid out several ways and left side should mimic right side:

- 1 species per bed (2 species total)
- 2 species per bed (4 species total)
- 1 species in upper bed and 2 species in lower bed, vice versa (6 species total)

