

# Help Pollinators, Help Birds, Build Habitats! 

 Build a Native Garden at Belmont Middle and High School

Slidês Created in Partnership with Jean Devine, Devine Native Plantings And modified by Belmont High School Climate Action Club

## The Urgency of Now!

- Climate change is real.... and visible
- Biodiversity loss is really serious ... and not so visible
- We can't wait for others to fix either one
- Happily, we are not alone...The movement* has begun
* Toward native plant gardens everywhere!



## Native pollinators need native plants because they are

- Native to our region (\& not cultivars)
- Known to support:
- native pollinators
(good)
- specialists vs. generalists
- at-risk specialists
(best)
- Season-long bloom
- March-Nov.
- plants, shrubs, vines, trees
- Opportunities for soft-landings \& over-wintering


## Pollinators need plants for food



Pollen = food for adults \& their babies
ex. bees put pollen into the nest so the emerging larva has something to eat

<-Host Plant = baby food for larva...which becomes a caterpillar

Caterpillars are soft, protein-rich food for baby BIRDS

## BHS CAC Pledges to Garden with Intention to make a Healthy Habitat for pollinators, birds, and wildlife.

+ Remove invasive plants - volunteers \& invited
+ Plant for pollinators, insects, birds \& wildlife
+ Universal Design: Plant for the most robust, biodiverse ecosystem that will support many species \& build resilience
+ Leave nothing bare. Ground covers and fallen leaves are better than mulch.
+ Edit out - redeploy the aggressives. Add diversity
+ Idle - leave the leaves! That's home.
Remove. plant. edit. idle. repeat


## Plant Blueprint of the BHS Native Gardens

- Early Summer:
- Polemonium reptans: Jacob’s ladder
- Zizea aurea: Golden Alexander
- Mid Summer:
- Ascelpias incarnata: Swamp Milkweed
- Coreopsis lanceolata: Lance Leaf Coreopsis
- Echinacea purpurea: Purple Coneflower
- Monarda fistulosa:Wild Bergamot


## Late Summer:

- Aster novae-angliae: New England Aster
- Chelone Glabra: White Turtlehead
- Solidago odora: Sweet Goldenrod


## Mystic Charles Pollinator Pathways



Mystic Charles Pathway map: http://tiny.cc/MCmap
With the native gardens, Belmont will be included as a native garden community.

We will plant in fall; plants will continue to grow, year after year

## Native Gardens at BHS

Created by the BHS Climate Action Club (CAC)

## Location



Black triangle indicates location *not to scale


Exterior view *not to scale

100-200 sq. ft. of plants

Garden would consist of native plants and shrubs and educational signage to inform the public

## Funding

Estimated Total Cost: \$2619(Shown on next slide)

Total includes:

- Purchasing of the plants
- Maintenance of the plants

Current funds raising by the BHS CAC:
BHS CAC Native Garden Concert Fundraiser: \$1000

PTSO Grant: \$500
Private Matching Donation: \$1500
Total Raised: \$3000

| EXPENSES | Garden size | $\sim 120$ sq ft. | if 10" spacing | $\begin{aligned} & 120 * 1.45=\text { wd } \\ & \text { be } \sim 174 \text { plants } \end{aligned}$ | EXPENSES | Garden size | $\sim 120$ sq ft. | if 10" spacing | $\begin{aligned} & 120 * 1.45=\text { wd } \\ & \text { be } \sim 174 \text { plants } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item/Service | Cost/Unit | Unit | Quantity | Total Cost(\$) | Item/Service | Cost/Unit | Unit | Quantity | Total Cost(\$) |
| SITE PREPARATION |  |  |  |  | TOOLS |  |  |  |  |
| Turf Removal |  | student power |  |  | Shovels | 25 | ea | 4 | 100 |
| INSTALLATION |  |  |  |  | Gloves | 6 | ea pair | 20 | 120 |
| MATERIALS |  |  |  |  | Rakes/hoes | 20 | ea | 4 | 80 |
| PLANTS |  |  |  |  | Field flags | 12 | 100pk | 2 | 24 |
| Native plants - herbaceous quarts | 12 | ea | 75 | 900 | Bunny Fencing | 30 | 50 ft | 3 | 90 |
|  | 12 | ea | 75 | 900 | Fencing staples | 20 | pkg of 100 | 2 | 40 |
| Plugs | 4 | ea | 50 | 200 | SBTL-TOOLS |  |  |  | 454 |
| Native plant delivery (ship) | 20 |  | 1 | 20.00 | INSTALLATION |  |  |  |  |
| SBTL-PLANTS |  |  |  | 1,120.00 | LABOR |  |  |  |  |
| Water Supplies |  |  |  |  |  |  | student |  |  |
| hose | 45 | 100 ft . | 1 | 45 | Student workers |  | power |  | 0 |
| hose nozzle | 16 |  | 1 | 16 | Volunteer workers |  |  |  | \$0.00 |
| sprinkler, sled based | 35 |  | 1 | 35 | Printed MATERIALS |  |  |  |  |
| rain barrel + spigot | 65 |  | 1 | 65 | Site Signage and |  |  |  |  |
| Birdbath | 75 | ea | 1 | 75 | promotion | 50 | 3 | 1 | \$150.00 |
| SBTL-Water |  |  |  | 236 | SBTL-PRINT |  |  |  | 150 |
| SOIL/Mulch/Features |  |  |  |  | TOTAL PROJECT |  |  |  |  |
| Soil (50-50 Compost- |  |  |  |  | COSTS |  |  |  | \$2,619.00 |
| Loam) | 49 | cu yard | 6 | 294 |  |  |  |  |  |
| Leaf Mulch | 55 | cu yard | 3 | 165 |  |  |  |  |  |
| Delivery charges | 200 |  | 1 | 200 |  |  |  |  |  |
| SBTL-PLANTS |  |  |  | 659 |  |  |  |  |  |

## Educational Purpose of the Gardens

- Bio, Art classes can benefit from the gardens
- If we plant in the fall, use of the gardens will be available to students and classes by the spring


## Planting/Care Plan

BHS students will take care of the garden including:

- Planting
- Watering
- Maintenance

This will be organized by the BHS Climate Action Club leaders and advisor with help from a native plant expert and undertaken by club members and other students for community service hours.

## Thank you for your consideration and support!

Please feel free to ask or reach out to us with any questions.

Jean Devine Devine Native Plantings jmdevine@gmail.com

The BHS Climate Action Club
Audrey Brenhouseabrenhouse24@belmontschools.net Ellie Lesser elesser24@belmontschools.net
Daniel Morescodmoresco@belmontschools.net

