



To: The City of Somerville, Public Space and Urban Forestry, DPW, Buildings and Grounds
Cc: Somerville City Council, John Long, Peter Forcellese, Mayor Curtatone

From: Urban Forestry Committee

Subject: Butterfly bushes on Prospect Hill and discontinuing their use in plantings

*We, the Urban Forestry Committee, request that butterfly bush or any of its less invasive varieties (i.e., *Buddleja* spp., the entire *Buddleja* genus) not be planted in any of Somerville's parks, open spaces, civic spaces etc. and that the newly planted butterfly bushes in Prospect Hill be removed. If they cannot be removed before spring, they should be cut back so that seeds do not sow and germinate.*

Here is the reasoning for our request.

Butterfly Bush, *Buddleja davidii*, is a woody plant from Asia that was brought over because of its beauty and ability to attract butterflies. Because butterflies feast on it, most gardeners believe that it is a helpful plant to have. After all, how could a plant that butterflies seem to love be bad? Butterfly bushes are not inherently bad, no plant is, they are just misplaced.

We are in a 6th mass extinction. Our local birds, wildlife, and pollinator populations are in steep decline. Our Lepidoptera (butterflies and moths) whose caterpillars feed baby birds are particularly suffering. In order to increase their numbers we need to plant those plants that, in addition to feeding them, will host them so they can reproduce. Butterfly bush may feed a butterfly, but it will never serve to increase their numbers.

This would not be a huge problem save for the invasiveness and pervasiveness of these plants^{a,b}. An invasive plant is one that has been introduced to an ecosystem and whose introduction 'causes or is likely to cause economic or environmental harm or harm to human health'^c. Invasive species can spread by seed, aggressive, prolific or allelopathic root systems or by smothering surrounding plants with its vegetation. Invasive species outcompete native plants, destroy ecosystems and decrease biodiversity. Butterfly bushes have aggressive root systems and spread by seed. A single panicle of spent flowers can hold up to 40,000 seeds and a cut branch touching the ground can resprout and start a new bush. With an 80% germination rate and with seeds that float on air, butterfly bushes are excellent invaders^d.

Even though Butterfly Bushes meet all the criteria they are not yet on the invasive species list in Massachusetts: but they are considered invasive in the mid-atlantic^{e,f}. As we anticipate climate



change, Somerville should not only consider what is invasive on Massachusetts' list, but what is considered invasive to states whose climates we will resemble in the coming years.

Why is it a problem in Somerville parks?

Our parks are showcases for plants and landscaping. If done correctly we can be leaders in sustainable climate forward landscaping by using our public spaces to restore the ecosystem, grow our pollinators and inspire our residents and visitors to do the same, if done traditionally with a focus on non-native and invasive species we will never shift perspectives on what is needed to be done to ease climate change and mitigate insect decline.

The city staff worked with the landscape design team to come up with a plant palette of native plants in the Prospect Hill redesign. The four butterfly bushes in two beds along Monroe Street seem like an afterthought. There are many non-invasive native alternatives that would fit in better. See Appendix A.

There are now butterfly bush cultivars that are 98%-99% sterile, thus not as invasive: yet this is not a reason to plant them as they still have no hosting abilities for our lepidoptera. Cultivars have been known to revert genetics, like the variegated dogwood in Morse Kelley. Sterile plants may not always have that quality. If Somerville is committed to the environment, to combating climate change and boosting our pollinators, we must also commit to not planting invasive species and to planting the majority of our landscape with native plants.

We thank the Public Space and Urban Forestry division and the DPW for addressing this matter. We thank the mayor for his concern about our pollinator populations.

We ask that PSUF and/or DPW provide the UFC an update for our next meeting. The UFC would also like to see the planting plans for the site.

We also ask that this memo be entered into the public record.

Sincerely,

Althea Northcross
Chris Dwan
Co-chairs Somerville Urban Forestry Committee

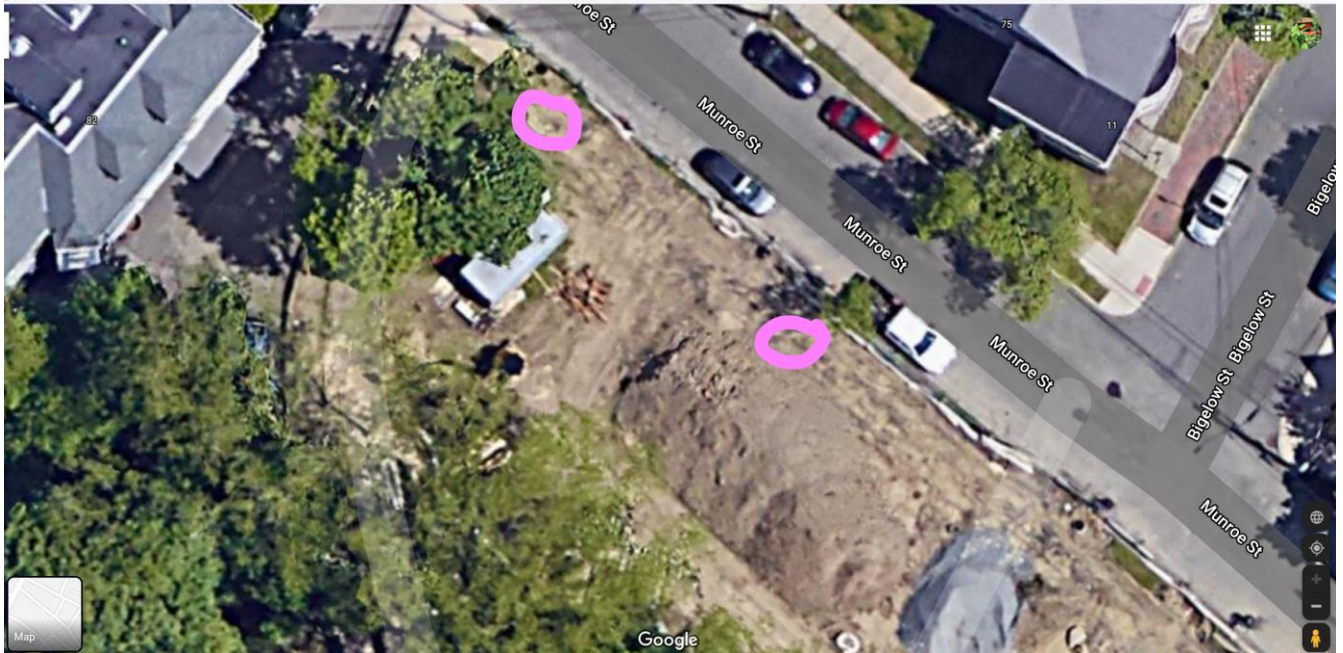


Appendix A - Alternative plants to Butterfly Bush:

New York Ironweed (*Vernonia noveboracensis*), New England Aster (*Symphyotrichum novae-angliae*), Sweet Pepperbush (*Clethra alnifolia*), Virginia Sweetspire (*Itea virginica*), Butterfly Weed (*Asclepias tuberosa*), Blazing Star (*Liatris spicata*), Steeplebush (*Spirea tomentosa*), Meadowsweet (*Spirea latifolia*), Witch hazel (*Hamamelis virginiana*), Chokeberry (*Photinia spp*), Mountain Laurel (*Kalmia angustifolia*), Serviceberry (*Amelanchier canadensis*), Common milkweed (*Asclepias tuberosa*), Swamp milkweed (*Asclepias incarnata*), Echinacea (*Echinacea purpurea*), Pussy Willow (*Salix discolor*), Elderberry (*Sambucus canadensis*), Spicebush (*Lindera benzoin*), Blueberry bush (*Vaccinium corymbosum*), Asters (*Symphyotrichum spp*), Goldenrod (*Solidago spp*), Buttonbush (*Cephalanthus occidentalis*), New Jersey Tea (*Ceanothus americanus*), Anise hyssop (*Agastache foeniculum*), Sweetspire (*Itea virginica*), Hazelnut (*Corylus americana*), Joe-pye weed (*Eutrochium purpureum*), Winterberry (*Ilex verticillata*).

Appendix B - Butterfly Bushes on Prospect Hill





References:

- a <http://www.ecosystemgardening.com/butterfly-bush-is-invasive-do-not-plant.html>
- b <https://extension.umd.edu/hgic/topics/butterfly-bush>
- c <https://www.fs.fed.us/wildflowers/invasives/index.shtml>
- d <https://www.brandywine.org/conservancy/blog/invasive-species-spotlight-truth-about-butterfly-bush>
- e <http://torontogardening.blogspot.com/2011/04/native-alternatives-to-butterfly-bush.html>
- f <https://www.invasive.org/eastern/midatlantic/>
- f <https://www.invasive.org/maweeds.cfm>