

Somerville Native Plant Ordinance

WHEREAS native pollinator populations since the 1970s have declined 70% from widespread use of pesticides in agribusiness, loss of habitat from development, and from our insistence on non-native plants in landscaping;

WHEREAS the food web, and life as we know it, will collapse without pollinators, and the USDA says “Pollination is not just fascinating natural history. It is an essential ecological survival function. Without pollinators, the human race and all of earth’s terrestrial ecosystems would not survive. Almost 80% of the 1,400 crop plants grown around the world that produce all of our food and plant-based industrial products require pollination by animals.”;

WHEREAS 90% of native butterflies and moths, and their larva, can only reproduce on the native plants they evolved with.

Whereas ~20% of native bees are **specialists**, meaning they can only rear their young on a narrow selection (indeed, sometimes just one species) of pollen. These native bees need native plants to complete their life cycle. As a bonus, generalist bees (the other 80%) will benefit from any plantings for specialist bees.

Solidago (goldenrod), *Symphyotrichum* (asters), *Helianthus* (sunflower) are a few genera that support many specialist bees. Native Ericaceous plants (esp. *Vaccinium*) are also favored.

WHEREAS Somerville declared 2018 the year of the bird and that native birds cannot rear their young without caterpillars, grubs, and soft insects;

WHEREAS birds also require the fruit, seeds, and berries that evolved alongside them to be ready when the bird needs them to provide the proper nutrition;

WHEREAS the beauty of our native creatures has been forgotten for 2 generations;

WHEREAS the Massachusetts office of coastal zone management (CZM) recommends planting natives wherever possible;

WHEREAS there is precedence for a native plant ordinance as the State of New Jersey passed a bill in 2017 stating that only native plants can be planted on State highways, because “they require no fertilizer, they are not sources of the polluting excess nutrients that stormwater and groundwater carry to nearby rivers, lakes and bays. Nutrient pollution from excess nitrogen and phosphorus—two principal ingredients in plant fertilizer—are by far the largest ecological problem for the preponderance of water bodies nationally” (savebarnegatbay.org);

WHEREAS the New England Native Plant Society recognizes the importance of native plants: “Plants are the basis of all life on the planet. Each native plant species supports insects, birds, animals, and other plants and microorganisms, and relies on them, in turn, for survival. The loss of a single plant species can lead to the collapse of related plant and animal species. In New England, where 593 species are now listed as rare or possibly extinct, it is vitally important to understand and protect our native plants.”;

WHEREAS the EPA recognizes the importance of native plants: to reduce soil erosion, improve water quality, reduce air and noise pollution, for carbon storage properties, and beauty. It

recommends that native landscaping is appropriate for homes, civic buildings, schools, libraries, office campuses, institutional sites, parks, roadways, and stormwater conveyance and detention areas;

WHEREAS the City of Somerville planted 135 trees in the spring of 2018 and only 29 trees (21%) were native species;

THEREFORE, Somerville will establish a Native Plant Ordinance.

All property that is required to have landscaping, including city-owned or maintained, commercial properties, and residences with 6 or more units, will plant the landscape site area using 100% natives trees, 100% native shrubs, 100% native grasses and ferns, and minimum 70% native flowers. 50% minimum of all aforementioned plants will be wild (not cultivars). The plants must be chosen from an established Massachusetts native plant list (e.g., Grow Native Mass: <http://www.grownativemass.org/whatarenativeplants>, New England Wildflower Society: <http://www.newfs.org/conservestate-of-the-plants>) and planted according to established guidelines. Any existing trees and plants in good condition can remain until they need to be replaced, at which time, this ordinance comes into effect.

Suggested Plant list for Urban Design

Long lived, large street trees—

Black cherry Prunus serotina
Oak sp. Quercus alba
Quercus palustris
Q. coccinea
Maples Acer rubrum
A. saccharum
Hickory Carya ovata
Sweet-gum Liquidambar styraciflua
Black-gum Nyssa sylvatica
Birches Betula alleghaniensis (yellow birch)
B. nigra (river birch)
B. lenta (black birch)
Sourwood Oxydendrum arboreum
Sassafras Sassafras albidum
Tulip tree Liriodendron tulipifera

Short lived, smaller and companion trees—

Grey birch Betula populifolia
Pin cherry Prunus pensylvanica
Choke cherry Prunus virginiana
Redbud Cercis canadensis
Dogwood Benthameidia florida
Silverbell Halesia carolina
Serviceberry Amelanchier canadensis

Understory, companion, living mulch—

Grasses and sedges—

Little bluestem Schizachyrium scoparium
Purple lovegrass Eragrostis spectabilis
Autumn bent grass Agrostis perennans
Wavy hair grass Deschampsia flexuosa
Pennsylvania sedge Carex pensylvanica
Narrow-leaved sedge Carex amphibola
Plantain-leaved sedge Carex plantaginea

Ground covers—

Canada anemone Anemone canadensis
Wild strawberry Fragaria virginiana
Woodland phlox Phlox stolonifera
Bleeding heart Dicentra eximia
Hay-scented fern Dennstaedtia punctilobula
Sweet-fern Comptonia peregrina (nitrogen fixer)

Wild flowers—

Milkweeds Asclepias syriaca (common milkweed)
A. tuberosa (butterfly weed)
A. verticillata (whorled milkweed)
Asters Symphyotrichum cordifolium
S. laeve
S. ericoides
S. patens
Eurybia divaricata
Goldenrods Solidago caesia
S. nemoralis
S. puberula
S. bicolor
S. sempervirens
S. odora
Wild indigo Baptisia tinctoria (nitrogen fixer)
Wild lupine Lupinus perennis (nitrogen fixer)
Columbine Aquilegia canadensis
New Jersey tea Ceanothus americanus (nitrogen fixer)
Boneset Eupatorium hyssopifolium
Mountain mint Pycnanthemum tenuifolium
Rose Rosa virginiana
Alexanders Zizia aptera
Beard tongue Penstemon hirsutus
Wild onion Allium canadense
A. cernuum
Bell flower Campanula rotundifolia
Bush clover Lespedeza