

# POLLINATOR GARDENS IN PUBLIC SPACES

## ENGAGING THE PUBLIC AS WELL AS THE BEES

BY BEN O'BRIEN



PHOTOS COURTESY OF BEN O'BRIEN

MY LAST ARTICLE FOCUSED ON THE MEDIUM FOR creating pollinator gardens – the plants and how to plant them. This instalment looks more closely at the most visible locations for pollinator plantings, and strategies to capture and engage the public as well as the bees.

### PUBLIC SPACES

Private gardens are the natural trialling and experimental laboratory for the home gardener. A more ambitious and potentially transformative route, however, is to pursue collaborative projects that invite gardeners and pollinators into our urban and rural public spaces. Public and high-visibility landscapes ripe for pollinator interventions include parks, corporate landscapes, and the affectionately named “hellstrip” (the tortured strip of turf between the sidewalk and street) in cities, as well as roadsides, municipal green spaces, and farms in rural areas. The scale and scope of these

projects are a direct result of funding, labour, and in some cases political will. Both urban and rural communities can face impediments that sometimes complicate the process.

In densely settled urban areas, public green space is precious. This means that any proposed alteration to the landscape involves an impenetrable web of restrictive by-laws and zoning restrictions. Rallying community support and following city protocols gives a group and their proposal credibility, and can help ease potential tensions between locals and park authorities. There is a tremendous opportunity in densely populated cities to engage the local population through volunteering and fundraising. An extreme example of this type of civic and private sector engagement is on New York City’s highly touted High Line Park. Being located in central Manhattan means the park staff has access to a vast and enthusiastic volunteer base. There also seems to be a bottomless bank account, courtesy of wealthy patrons

who donate millions toward the maintenance and management of the park’s extensive perennial plantings. Pollinator gardens in city parks offer a similar opportunity, albeit on a much smaller scale. Engaging volunteers and fundraising effectively (there are plenty of opportunities to pursue private sector or non-profit grant funding for urban greening projects) can ensure a garden’s longevity as a social and ecological community hub.

Rural areas have their own set of challenges and opportunities. Given the close proximity to agriculture, it’s important to coexist peacefully with farmers. This means avoiding certain plants that, while beneficial to pollinators, could invade farmland, interfere with crops, and become a nuisance. Some especially aggressive species include goldenrod (*Solidago* spp.) and certain asters, such as the purple New England aster *Symphotrichum novae-angliae*. Cooperating and collaborating with farmers can lead to projects with far-reaching ecological impacts. Linking fields together using wide, un-mown roadside verges bursting with wildflowers and native shrubs not only benefits pollinators, but provides a valuable corridor for other wildlife, and could possibly improve yields and reduce soil erosion on neighbouring fields. This ability to radically broaden the scope of a project from the residential to the regional scale is one of the great opportunities for those of us in rural areas with lots of previously neglected land to play with.

### PUBLIC PERCEPTION

Aside from plant selection, aesthetic composition is the factor that can ultimately determine the success or failure of a planting – whether it’s along a roadside in the country, or in a city park in Toronto. Joan Nassauer, professor of landscape architecture at the University of Michigan and Fellow of the American Society of Landscape Architects, has written extensively about the importance of integrating aesthetics into discussions of ecological design. Through various studies, she has determined that habitat creation projects that consciously combine ecology and clear, artful composition are those that endure and that – perhaps more importantly – people come to care for and love. The goal of pollinator gardens, especially in public spaces, should be as much about engaging and inspiring people as it should be about providing year-round forage. As designers, we need to clearly communicate the inherently cultural nature of a garden. We must avoid plantings that decay into a mass of messy, fuzzy, weedy mush. Plantings without what Nassauer calls aesthetic “cues of care” are the ones that compel people to mow rather than nurture and enjoy.

There are a variety of tips and tricks to turn a ragged and weedy looking pollinator habitat into one that looks intentionally designed, tended, and loved.

RURAL AREAS HAVE THEIR OWN SET OF CHALLENGES AND OPPORTUNITIES. COOPERATING AND COLLABORATING WITH FARMERS CAN LEAD TO PROJECTS WITH FAR-REACHING ECOLOGICAL IMPACTS.



“BEE HOTEL” AT THE TORONTO BOTANICAL GARDEN



LURIE GARDEN



## 1) DESIGN AND LAYOUT STRATEGIES

- Make sure a planting is accessible and visible from all sides, with paths intersecting and moving throughout if size permits. Encouraging people to engage and participate allows them to look closely and witness the intimate engagement between pollinators and plants.
- Crisp planting edges or the straight lines of geometrically clipped hedges are clear structural, obviously unnatural forms in an otherwise wild looking planting. The old adage “nature abhors a straight line” means people will recognize stark lines as clear cultural interventions.
- Incorporating artwork, sculptures, interpretive signs or habitat structures – such as bird houses and bee boxes – can also be an effective way to introduce a cultural quality to a planting. These are simple objects that indicate conscious design and intent. An excellent example of a simple, artful habitat structure is the “bee hotel” at the Toronto Botanical Garden (pictured on previous page).

## 2) PLANTING STRATEGIES







- The majority of species should be low to mid-height (under one metre is a good benchmark). This allows people to look across and through the planting, gives an opportunity to combine colours and textures in a smooth tapestry, and minimizes any potential safety or security concerns. In general, herbaceous plants are preferred since they die back each year.
- Repeat large blocks of single species throughout the planting. This is a technique used to great effect by Piet Oudolf at the Lurie Garden in Chicago (pictured) where a river of purple *Salvia nemorosa* weaves through the more diverse prairie wildflowers. It is a striking foil to the complexity of the rest of the planting, and is a clear statement that the planting is a designed garden.







- Intermingle traditional garden plants. This is a more subtle cue that a pollinator planting is indeed a garden. People instantly recognize traditional garden varieties of tulips, daylilies, peonies, and hostas as domesticated plants. Even if they are of little value to pollinators, used sparingly they can act as a cue to people that the planting is a tended garden, and not just a patch of “weeds”.
- Some non-native garden plants that are useful for pollinators – *Nepeta racemosa* (catmint), *Salvia nemorosa* (perennial sage), and *Geranium* spp. (crane’s bill geraniums) for example – are good filler plants for early summer bloom. Their foliage can look tired after flowering, however cutting back after blooming can encourage a flush of new foliage and a second bloom in the fall, avoiding any public perception problems.

Some of the most celebrated designed landscapes in recent years – from the High Line in New York City to the Lurie Garden in Chicago, to the 2012 Queen Elizabeth Olympic Park in London, to the Qunli National Urban Wetland in China – have all, in their own ways, managed to strike this fine balance between artistic expression and habitat creation. They are all clearly designed places for people, but more importantly they are places that are buzzing with life. They are the embodiment of a new, more cooperative relationship between people and nature.

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Latin Name	Common Name							Exposure	Soil	Bloom	Height	Notes
<b>Shrubs</b>												
<i>Aesculus parviflora</i>	bottlebrush buckeye	x		x	x			HSh	M-D	SU - white	2-3 ft.	white flower spikes in summer
<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	x			x	x		Su-Sh	M-D	SP - white	10-15 ft.	edible berries loved by birds
<i>Amelanchier canadensis</i>	Canada serviceberry	x			x	x		Su-Sh	M-D	SP - white	15-20 ft.	edible berries loved by birds
<i>Amorpha fruticosa</i>	indigo bush	x			x	x		Su-HSh	D	SU - purple	4-5 ft.	fixes atmospheric Nitrogen
<i>Ceanothus americanus</i>	New Jersey tea	x	x		x		x	Su-HSh	D	SU - white	4-5 ft.	superior pollinator plant
<i>Cephalanthus occidentalis</i>	buttonbush	x	x		x	x		HSh-Sh	M-W	SU - white	10 ft.	unique spherical flowers
<i>Cercis canadensis</i>	Eastern redbud	x	x				x	Su-Sh	M-D	SP - pink	20-25 ft.	flowers before leaves emerge
<i>Cornus racemosa</i>	grey dogwood	x			x	x	x	Su-Sh	M-W	SU - white	4-5 ft.	deep purple autumn foliage
<i>Crataegus crus-galli</i> var. <i>inermis</i>	cockspur hawthorn		x		x	x	x	Su-HSh	M-D	SU - white	15-20 ft.	(var. <i>inermis</i> ) is thornless
<i>Ilex verticillata</i>	common winterberry	x			x	x	x	Su-HSh	M-W	SP - pale green	3-4 ft.	male and female required
<i>Physocarpus opulifolius</i>	ninebark	x	x				x	Su-Sh	D-W	SU - white	5-6 ft.	interesting exfoliating bark
<i>Rhus aromatica</i>	fragrant sumac	x	x	x	x		x	Su-Sh	D	SP - yellow	3-4 ft.	bright red autumn foliage
<i>Rhus typhina</i>	staghorn sumac	x	x	x	x		x	Su-HSh	D	SU - red	10-15 ft.	seedheads offer winter interest
<i>Rosa blanda</i>	smooth rose	x	x	x	x	x	x	Su	D	SU - pink	2-3 ft.	sweetly fragrant blooms
<i>Rosa carolina</i>	pasture rose	x	x	x	x	x	x	Su	M-D	SU - pink	2-3 ft.	sweetly fragrant blooms
<i>Rubus occidentalis</i>	blackberry	x	x	x	x		x	Su	M-D	SU - white	3-4 ft.	delicious berries in summer
<i>Rubus odoratus</i>	flowering raspberry	x	x	x			x	Su-Sh	M	SU - deep pink	4-5 ft.	spreads quickly
<i>Salix discolor</i>	pussy willow	x	x		x		x	Su	M-W	SP - yellow	10-15 ft.	beautiful catkins in spring
<i>Sambucus racemosa</i>	red elderberry	x	x				x	Su-HSh	M-W	SU - white	10 ft.	performs best in moist soil
<i>Spiraea tomentosa</i>	steeplebush	x			x		x	Su-HSh	M-W	SU - pink	5-6 ft.	performs best in moist soil
<i>Viburnum acerifolium</i>	mapleleaf viburnum	x			x	x		Su-Sh	M-D	SP - white	4-5 ft.	outstanding for wildlife
<i>Viburnum dentatum</i>	arrowwood viburnum	x			x	x	x	Su-HSh	M-D	SU - white	7-8 ft.	outstanding for wildlife

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<i>Penstemon digitalis</i>	foxglove beardtongue		x			x		Su-HSh	M-D	SP/SU - white	2-3 ft.	magnet for bumblebees
<i>Pycnanthemum tenuifolium</i>	mountain mint	x	x		x		x	Su-HSh	M-D	SU/AU - white	3-4 ft.	superior pollinator plant
<i>Ratibida pinnata</i>	grey headed coneflower		x		x		x	Su	D	SU - yellow	4-5 ft.	spreads quickly
<i>Silphium perfoliatum</i>	cup plant	x	x	x	x	x	x	Su	D	SU/AU - yellow	6-7 ft.	outstanding for wildlife
<i>Symphotrichum novae-angliae</i>	New England aster	x	x		x			Su	M-D	AU - purple	3-4 ft.	late season blooms
<i>Tiarella cordifolia</i>	foamflower		x		x	x		HSh-Sh	M	SP - white	1 ft.	lovely shade ground cover
<i>Tradescantia virginiana</i>	spiderwort		x		x			Su-Sh	M-D	SU - dark purple	1-2 ft.	unique grassy texture
<i>Vernonia gigantea</i>	ironweed		x		x		x	Su	M-W	SU/AU - purple	5-6 ft.	performs best in moist soil
<i>Veronicastrum virginicum</i>	Culver's root	x	x		x		x	Su-HSh	M-W	SU/AU - white	3-4 ft.	performs best in moist soil
<i>Verbena hastata</i>	blue vervain		x		x	x	x	Su-HSh	M-W	SU - purple	3-4 ft.	spreads quickly
<i>Zizia aurea</i>	golden Alexanders		x		x			Su-HSh	M-D	SU - bright yellow	2-3 ft.	larval host for Swallowtail butterfly
<b>Grasses</b>												
<i>Andropogon gerardii</i>	big bluestem			x	x		x	Su	M-D	AU - seedheads	5-6 ft.	lovely autumn foliage
<i>Bouteloua curtipendula</i>	sideoats grama			x	x		x	Su-HSh	M-D	SU - seedheads	2-3 ft.	interesting seedheads
<i>Bouteloua gracilis</i>	blue grama				x		x	Su-HSh	M-D	SU - seedheads	1-2 ft.	interesting seedheads
<i>Deschampsia cespitosa</i>	tufted hairgrass				x		x	Su-Sh	D-W	SU - seedheads	2-3 ft.	soft, delicate texture
<i>Koeleria macrantha</i>	prairie junegrass			x			x	Su	D	SU - seedheads	1-2 ft.	performs best in dry soil
<i>Panicum virgatum</i>	switchgrass				x		x	Su-HSh	M-D	AU - seedheads	4-5 ft.	soft, delicate texture
<i>Schizachyrium scoparium</i>	little bluestem			x	x		x	Su-HSh	D	AU - seedheads	2-3 ft.	performs best in dry soil
<i>Sorghastrum nutans</i>	Indian grass			x	x		x	Su-Sh	M-D	AU - seedheads	5-6 ft.	lovely autumn foliage
<i>Sporobolus heterolepis</i>	prairie dropseed			x			x	Su	D	SU - seedheads	1-2 ft.	herbal fragrance

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