2023 SHELAGH LAW PARKETTE PHASE I

Glen Williams, ON GWCA Pollinator Pathway/Beautification Project Planting Plan v.1.1

GWCA VISION FOR THE SHELAGH LAW PARKETTE PHASE I

The GWCA is designated by the Town of Halton Hills as the official steward of the Shelagh Law Parkette in Glen Williams on ______. Our vision is to create and maintain gardens and landscaping at the parkette which:

- satisfy the human need to spend time in nature;
- provide bird-friendly and pollinator habitat;
- support a healthy riparian zone;
- contribute to the community's biodiversity.

Location of garden borders (numbered) on diagram:



Please note that any of the proposed plant options in this document may be supplemented/substituted with plants recommended by Credit Valley Conservation in their publicly available facts sheets, which can be downloaded online at their website: (<u>https://cvc.ca/index.php?s=&post_type=document&document_type%5B0%5D=954&date_start</u> =&date_end=&filter_tags%5B0%5D=sustainable-landscaping)

STRATEGY

- 1. Create and maintain garden beds which consist of:
 - at least 80% locally native herbaceous plants;
 - no more than 20% herbaceous plants that are nativars, near-native, and/or sterile hybrid non-native plants, all of which attract pollinators but pose no risk of spreading into natural areas.
- 2. Eliminate invasive species wherever found within the boundaries of the Parkette.
- 3. Restrict new plantings of shrubs and trees to locally native species and replace exotic woody plants with natives as they die off and/or are removed.
- 4. Protect shade trees from mechanical damage from string trimmers as well as root competition stress from turfgrass either by:
 - incorporating them into garden beds, or
 - ensuring there is always mulch (properly applied natural wood-chip or living mulch) at the base of each tree extending out to the drip-line.
- 5. Maximize biodiversity in the parkette by limiting the area of mowed turfgrass to areas that are frequently walked on and/or actually used for recreational activity.

PLANTING PLAN - Fall 2023 - Spring 2024

GARDEN BED #1, #2, #8:

Fill the beds densely with sun-loving and drought-tolerant herbaceous plants native to Ontario, including grasses and tall pollinator plants found in remnant prairie habitat. The pollinator plants in Bed #2 located in front of the rocks are shorter so that they don't cover the memorial plaques attached to the rocks. These plants will provide nectar and pollen at different times of the season as well as provide food for a variety of pollinators, butterflies, and other types of native insect life essential to the food chain.



Native Plants, Full Sun:

- Pale Coneflower (Echinacea pallida)
- Purple Coneflower (Echinacea purpurea)
- Butterflyweed (Asclepias tuberosa)
- Heath Aster (Aster ericoides)
- Smooth Aster (Symphyotrichum laeve)
- Anise Hyssop (Agastache foeniculum)
- Hoary Vervain (Verbena stricta)
- Grey-headed Coneflower (Ratibida pinnata)
- Smooth Beardtongue (Penstemon laevigatus)
- Liatris (Liatris spicata and/or Liatris cylindricea)
- Prairie Smoke (Geum triflorum)
- Little Bluestem (Schizachyrium scoparium)
- Wild Strawberry (Fragaria virginiana)
- Pearly Everlasting (Anaphalis margaritacea)
- Wild Lupin (*Lupinus perennis*)
- Horsemint (Monarda punctata)
- Ironweed (Vernonia missurica)
- Sneezeweed (*Helenium autumnale*)
- Grass-Leaved Goldenrod (*Euthamia graminifolia*)
- Indian Grass (Sorghastrum nutans)
- Big Bluestem (Andropogon gerardii)
- Switchgrass (Panicum virgatum)
- Swamp Milkweed (Asclepias incarnata)

Near Natives/Nativars, Full Sun:

- Sundrops (Oenothera fruticosa)
- Prairie Dropseed (Sporobolus heterolepis)
- Rattlesnake Master (Eryngium yuccifolium)
- Blue Wild Indigo (Baptisia australis)
- Liatris spicata 'Kobold'
- Liatris Ligulistylis

GARDEN BED #3:

Plants under the maple and locust trees need to be tolerant of dry shade/part-shade. We'll also plant a couple of understory trees and/or shrubs to provide a visual break from the road as well as food and shelter for birds. Woodland Strawberry (*Fragaria vesca*) will be used as a "green mulch" to shade the soil and prevent weed seeds from germinating. We may have to experiment to see which plants will thrive in the shallow root system of the maples and locust trees.

We'll also experiment with a couple of sun-loving species of pollinator plants between the two maple trees, where the west-facing side of the bed gets more sun.



Native Plants, Shade/Part Shade:

- Wild Bergamot (Monarda fistulosa)
- Sky Blue Aster (Aster oolentangiensis)
- Scarlet Beebalm (Monarda didyma)
- Purple Stemmed Aster (Symphyotrichum puniceum)
- Blue-Stemmed Goldenrod (Solidago caesia)
- Nodding Wild Onion (Allium cernuum)
- Wild Ginger (Asarum canadense)*
- ZigZag Goldenrod (Solidago flexicaulis)*
- Wild Ginger (Asarum canadense)*
- Bloodroot (Sanguinaria canadensis)*
- Foamflower (Tiarella cordifolia)*
- Golden Alexander* (Zizia aurea)*
- Virginia Waterleaf (Hydrophyllum virginianum)*
- Canada anemone (Anemone Canadensis)*

- Woodland Strawberry (Fragaria vesca)*
- Blue-Stemmed Goldenrod (Solidago caesia) (for slopes)*
- Late Boneset (Eupatorium serotinum)*
- Wild Geranium (Geranium maculatum)*
- Pennsylvania sedge (Carex pensylvanica)*
- Nodding Wild Onion (Allium cernuum)*
- Grey's Sedge (Carex grayi)*
- White Wood Aster (Eurybia divaricata)
- Heart Leaf Aster (Aster cordifolius)
- Big Leaf Aster (Eurybia macrophylla)
- False Sunflower (Heliopsis helianthoides)
- Maianthemum stellatum (Starry False Solomon's Seal)*
- Black-eyed Susan (Rudbeckia hirta)
- Red Baneberry (Actea rubra)
- Columbine (Aquilegia canadensis)

GARDEN BEDS #4 (on both sides of the path around the lamppost):



the picnic table is often trampled by visitors, mainly when they pull the table close to the tree trunk on hot days for more shade. To discourage this behaviour and to add to biodiversity, we propose a mass planting of a

single species of shrub under both trees - the Carolina Rose (*Rosa Carolina*). This pollinator-friendly native shrub is drought-tolerant, so it should be able to establish within the shallow root system of the Locust trees.

GARDEN BED #5 & GRASSY AREA:



The lawn area beyond this oak tree is very seldom used by visitors to the park - people tend to congregate in the shade of the trees on the far side beyond the lamp post, or under the shade of an existing mature tree by the river close to the bridge.

Recommendations:

 We propose to plant a sapling of a Red Oak (*Quercus rubra*) in the same space as an earlier tree to (eventually) make it more comfortable to spend time in. We also propose to have one or two large boulders placed in front of each tree to protect the trunks from river ice in spring; these boulders could be used in future for memorial and/or information plaques.



- 2) Solitary trees planted in the lawns of the parkette must be protected from turf grass right out to the drip line of the tree branches. Where possible we will connect the trees with garden beds. Where trees stand alone in the lawn, wood chips around the base of the tree (Bed #5 above) protects delicate feeder roots from competition and also removes the risk of mowers/string trimmers getting too close to the trunk of the tree. However, the wood chips will decompose within 2-3 years and so would require constant weeding and replenishment. For a more permanent solution, we propose to plant densely around the base of the trees with the following shade tolerant pollinator plants:
 - Wild Geranium
 - Wild Ginger
 - Zig Zag Goldenrod

GARDEN BED #6a (3 metres from both sides of the path):



We propose to use densely-planted, low-growing woodland plants within 3 metres of both sides of the pathway^{*}. The goal is to eventually eliminate the need to replenish the wood chip mulch; the plantings will form a living mulch that provides habitat and food for pollinators. Note that plant choices under the Black Walnut trees must be juglone-tolerant.

*Plants choices at the very entrance to the pathway from Main Street and along the road will need to be tolerant of full sun/dry conditions; see plant lists for Beds #1 & #2.

Woodland Native Plant list (low growing), Juglone Tolerant:

- Wild Ginger (Asarum canadense)*
- ZigZag Goldenrod (Solidago flexicaulis)*
- Wild Ginger (Asarum canadense)*
- Bloodroot (Sanguinaria canadensis)*
- Foamflower (Tiarella cordifolia)*
- Golden Alexander* (Zizia aurea)*
- Virginia Waterleaf (Hydrophyllum virginianum)*
- Canada anemone (Anemone Canadensis)*
- Woodland Strawberry (Fragaria vesca)*
- Wild Geranium (Geranium maculatum)*
- Pennsylvania sedge (Carex pensylvanica)*
- Nodding Wild Onion (Allium cernuum)*
- Grey's Sedge (Carex grayi)*
- Big Leaf Aster (Eurybia macrophylla)*
- Maianthemum stellatum (Starry False Solomon's Seal)*

GARDEN BED #6b (the "hill"):

This plan calls for the hill (this side of the Walnut tree in the photo below) to be planted in different height layers:

- 1. Top layer consisting of tall shade trees: The existing Oak tree and two Black Walnuts, plus an additional 1 or 2 shade trees placed clear of the power lines;
- 2. Mid-layer with small trees and shrubs that provide nectar and fruit as well as places for birds to hide from predators or build nests;
- 3. The "forest floor" with woodland perennials that attract insect life for birds to feed their young.



This area has the potential to provide valuable habitat for birds, so the plant choices will keep in mind their needs for food, shelter, and nesting habitat. We are also mindful of including flowering shrubs and small trees that will provide colour.

Please note that in Spring 2023 we laid the wood chips down very thickly on the hill to try to smother the False Spirea as much as possible. It is still coming up in some places and we'll keep killing it as it comes through until it is completely eradicated; if we try to

plant while it persists it will eventually take over again and smother any native plants we try to add.

We prefer to plant in the fall, when trees, shrubs, and perennial plants are starting to go into dormancy; it gives them the best chance of success with minimal tending.



We hope to plant shade trees this fall (late Sept to mid Oct 2023). We hope to be able to plant shrubs in the spring and fall of 2024. We will wait until the wood chips have started to significantly decompose before planting a dense base layer of herbaceous perennials, possibly fall 2024. The tree and shrub choices will need to be Juglone-tolerant given the two existing young Black Walnuts on the hill.

Understory Plant Options:

Woodland Native Plants:

- List for Garden Bed #3 plus:
- Blue-Stemmed Goldenrod (Solidago caesia)
- Late Boneset (Eupatorium serotinum)*
- White Wood Aster (*Eurybia divaricata*)
- Heart Leaf Aster (Aster cordifolius)
- False Sunflower (Heliopsis helianthoides)
- Black-eyed Susan (Rudbeckia hirta)
- Red Baneberry (Actea rubra)
- Columbine (Aquilegia canadensis)

Shrubs:

- Spicebush (*Lindera benzoin*)
- New Jersey Tea (Ceanothus americanus)
- American Hazelnut (Corylus americana)
- Buttonbush (*Cephalanthus occidentalis*)
- Nannyberry (*Viburnum lentago*)

Small Trees (25-30 ft):

- Wild Plum (*Prunus americana*)
- Witch Hazel (*Hamamelis virginiana*)
- Alternate-leaf Dogwood (Cornus alternifolia)
- Eastern Redbud (Cercis canadensis)
- Serviceberry (Amelanchier laevis or arborea)
- Sassafras (Sassafras albidum)

Additional Shade Trees for the hill:

- Black Cherry (*Prunus serotina*)
- Bitternut Hickory (Carya cordiformis)

GARDEN BED #7 (in front of the sign at the corner of Main/Confederation):

This bed is contaminated with field bindweed and will always require constant maintenance and hand weeding to keep it under control. However it also commands a prominent place at the entrance to the parkette and the Glen, so the plant choices - which must be tolerant of full sun and dry conditions - will ideally be showy with something in bloom (as much as possible) throughout the growing season.



Near Natives/Nativars for Full Sun:

- Butterfly milkweed (Asclepias tuberosa)
- Prairie Smoke (*Geum trifolium*)
- Sundrops (Oenothera fruticosa)
- Heath Aster (Aster ericoides)
- Prairie Dropseed (Sporobolus heterolepis)
- Purple Coneflower (*Echinacea purpurea*)
- Pale Coneflower (Echinacea pallida)
- Rattlesnake Master (Eryngium yuccifolium)
- Blue Wild Indigo (Baptisia australis)
- Liatris spicata 'Kobold'
- Liatris Ligulistylis
- Wild Bergamot (*Monarda fistulosa*)

Non Native Options

This bed is at the entrance to the parkette at Main/Confederation and we have added some non-native plant options that are shorter in stature and/or showy:

- Sedum 'Autumn Joy'
- Yarrow 'Moonshire'
- Salvia
- Russian Sage
- Feather Reed Grass 'Karl Foerster'
- Echinops Globe Thistle
- Tulip, Crocus, Daffodil bulbs

GARDEN BED #8 (along Confederation to the north of the parkette signage):



As with Beds #1 and #2, we propose to fill the beds densely with sun-loving and drought-tolerant herbaceous plants native to Ontario, including grasses and tall pollinator plants found in remnant prairie habitat. Tall native plants will provide shelter from the "busy-ness" of the road.