

Urban Meadow Gardens



Native meadows and fields (glade, prairies) are one of the lesser-valued type of habitat within a cityscape. Native meadows and prairies have been replaced by agriculture, farmland and abandoned fields that fill up with non-native species. These types of “grassland” do not provide the rich habitat that supports a healthy, resilient, biodiverse ecosystem. Woodlots and wetlands tend to be prioritized when park and conservation lands are identified, but a mixture of habitats is valuable as it supports a more diverse set of flora and fauna species.

A biodiverse ecosystem supports an abundance of wildlife, so it would be beneficial to increase this type of landscape option in urban areas. Large properties that are predominantly lawn can be transformed into urban meadows. Smaller plots of land can also be transformed. If these small plots can be part of a linked “pollinator corridor” or close to a greenspace, the benefit will be compounded. Faith community memorial gardens and cemeteries are also a potential location for some of these swaths of meadows. For smaller properties an urban meadow garden bed could be a consideration. This transformation of a portion of a landscape back to a more natural ecosystem that supports a variety of species is a wonderful way to demonstrate *Care for Creation*.

If you are starting an urban meadow garden, purchase as locally as possible to ensure that the seeds and plants are native and hardy for the local conditions and zone. Some options for purchase can be local conservation groups, local gardening clubs and local nurseries. There are three options to consider if you want to introduce an urban meadow to your property:

Urban Meadow Garden Bed

This is a more landscaped, deliberate option that would require weeding and nutrient cycling similar to other garden beds. It is an option for a smaller urban property and/or if the unique maintenance of a full urban meadow is not desired. A meadow flower bed would be easy to add to a garden landscape and include in the normal garden maintenance routine.

Choose a sunny area or a current garden bed that receives at least six to eight hours of sunlight a day during most of the growing season. You can retrofit a current bed by adding native meadow

flowers and grasses, just ensure to choose a garden bed that doesn’t require a lot of watering. There are some wetland meadow flowers but they will require more effort and care. While all new plants require some extra maintenance during the first year, once they are established, drought tolerant native plants need little to be sustained. If you are establishing a new garden bed – follow the information in the primer on how to create a new garden bed.

With a small garden bed (whether a new one or an existing one), choose plants and plugs (small seedlings) over the option of scattering seeds. This will ensure that the new native plants can become well established and other non-desirable plants are fewer. The plants can also be positioned in specific locations in the bed to help create the best design rather than a random scattering of seeds. Add grasses to the garden bed to help mimic the typical environment of a meadow where the mixture is approximately seventy percent wildflowers and thirty percent grasses.

There are a variety of grasses and flowers that can handle different conditions including soil type, moisture levels and amount of light. Some are more adaptable and these varieties would be a good choice when starting a new garden bed. Below are some examples of native Ontario wild flowers that can handle dry spells that are a great choice for a new or transformed sunny meadow bed:

- **Lower front row:** Prairie Smoke (dry, all soils), Wild Strawberry (dry, all soils), Wild Bergamot (dry, all soils).
- **Middle row:** Asters (dry, not sandy), Black-eyed Susan (dry, all soils), Yarrow (dry, not



clay), Milkweed (dry, all soils), Beard-tongue (dry, all soils), Pearly Everlasting (dry, all soils).

- **Tall back row:** Showy-Tick Trefoil (mesic, all soils), Sneezeweed (dry, all soils) Common Evening Primrose (dry, all soils) Blue Vervain (mesic, all soils)

Add grasses in the middle and back such as Canada Wild Rye, Switch Grass, Little Bluestem or Indian Grass.

Wildflower Garden Tips:

- Consider allowing the garden to ebb and flow naturally, where some years certain plants will do better than others.
- Leave wildflower seed heads up in the garden over the winter for birds, and only cut back in spring.
- Do not add nitrogen fertilizers as meadow plants can compete against undesirable plants better when soil is low in nitrogen.

Small Urban Meadow

This is a less landscaped option that would require less weeding and nutrient cycling, especially after the meadow is well established. Establishment of a meadow takes two to three years, and will require some commitment during this time. After this, however, maintenance is simple mowing once a year. This type of urban meadow could be added to the edges of a property, behind the main building and/or in an area that has minimal visits from the public. If the desire is to have an urban meadow as a visible demonstration of Caring for Creation, public support should be gathered and local municipal by-laws need to be considered. Providing signs that share the intention of the project and educate the public can also increase appreciation for this natural landscaping initiative.

When locating the urban meadow consider a spot that can be easily seen from within the faith community building and from key locations outdoors so that the landscape can be enjoyed year round. Allow as many people as possible to benefit from this serene, uplifting landscape by offering a shaded seating area that provides a great vista

of the urban meadow, and add some focal points whether they are a path through the meadow, a tree by the side of the meadow or a monument located in the middle. This type of landscaping could also be considered for parking lot strips.

Meadows have compact, dense vegetation, and should be viewed as one large entity rather than putting emphasis on the individual plants. Instead of mulch let the grasses be the base layer. The urban meadow will display a variety of colours throughout the season as different wildflowers come into bloom. Provide the opportunity for the plants to layer throughout the landscape and/or show up as drifts that create patterns and interest. With little maintenance, the plants will ebb and flow and regenerate on their own.

There are a variety of options to start a new garden bed including the lasagna garden method, double spading, and rototilling that can be chosen depending on time and resources. Here are two simple options to start a small urban meadow in an area that was once lawn:

- **Remove turf and the first ten centimeters of soil.** Allow current (undesirable) seeds that are in the ground to germinate and grow for two weeks and then remove the new seedlings. At this point your plot is ready for new plants.
- **Cover area with clear plastic sheets.** This solarizing method works best in the warmer months. Cut the grass as short as possible, anchor down the sheets and leave them on until you can see that the grass is dead. This usually takes about 3 – 5 weeks depending on the time of year. Once you take off the plastic, disturb the soil as little as possible before planting. This can also be done in the fall for a spring planting. Reintroduce healthy beneficial microbes by adding a thin layer of compost or an “organic tea” compost before you plant (but do not use any soils or manure that may have seed).

Planting Your Meadow:

Seed in the meadow grasses such as Little Blue Stem and Sideoats Gramma, and add flower plugs in groupings or sweeping lines. Follow directions



from garden nurseries for spacing of individual plants. Leave edges to naturalize.

Consider some shrubs around the side, especially the north and east so as to provide some cover, shelter, and windbreak for wildlife. Choose native shrubs that do not spread aggressively through runners or roots to keep maintenance at a minimum.

Adding simple fencing around the area (whether it's a simple wire edge border low to the ground or basic posts with a rope marking off the boundaries) can help demonstrate that the area is an intentional landscape.

Large Urban/Suburban Meadow

A large urban meadow is an option for the more suburban faith community that is located on a large property or for memorial gardens and burial grounds. After being established, a meadow requires very little maintenance other than one or two mowings per year. Compliance with by-laws need to be researched. Since enforcement of by-laws happens more regularly when there is a concern raised by neighbours, sharing the intentions and purpose of a native meadow garden with neighbours and getting community support will allow the meadow to flourish and be appreciated.

The more intentional the meadow looks, the more it will be valued. Create a meandering pathway around one corner or down a side. Limit the paths to just a few, so as not to breakup the ecosystem unnecessarily. Add stepping stones, or a lookout/seating area that provides a great vista of the meadow so that parishioners and visitors can enjoy the serene picturesque setting. Ensure that there are some opportunities to enjoy the meadow from inside the building also so that the congregation has a front row seat for the seasonal colours and active wildlife including butterflies, birds, fireflies, etc. These types of meadows are highly valued landscapes for grassland birds such as Bobolinks, Goldfinches and some Sparrows. Meadows should be cut in the late fall so as not to interfere with possible nesting birds.

To establish this type of landscape, options include rototilling, solarizing or using a soluble

chemical to remove existing vegetation. The effort to convert a larger space must be weighed against the resources of time and funding. Two less invasive methods that require minimal prep time but more maintenance for the first few years follow. This could be an option when resources are not available for a quick conversion.

Plug and seed conversion. Start in spring or fall with cutting grass very short and remove grass cuttings. Break up ground randomly to create gaps. Fill these areas immediately with plugs or donated transplants. With this method seeding heavily with grasses and meadow flowers in both spring and fall are recommended for the first few years while natives are being established. Always cut and rake before a new seeding and keep seeds wet to germinate. Weeding would be needed to control unwanted plants. Do not let them reestablish and get above 30 centimeters.

Native grass conversion. Slowly transform grass by reseeded with fine fescues and other native grasses. To prepare the site, cut and rake lawn to eliminate thatch, and add fescue seed. This again can be done in the spring or fall. As the native grass conversion takes over, allow portion of the lawn to renaturalize with some wildflowers, but remove unwanted and aggressive plants before they are firmly established. Add new native wildflower plugs in the third year to continue the conversion to a full perennial wildflower meadow.

Maintenance for Larger Urban Meadows:

- Keep in mind that a meadow conversion is a multi-year project. For the first two or three years, there will be weeding needed. Discourage Goldenrod, Queen Anne's lace and Thistle to grow in these years, as they can be aggressive and take over. Once native perennial grasses and flowers have been well established a few of these plants can be welcomed.
- If some specific design is desired for the meadow, thin plants that may be crowding out other plants. See if waves and patches can be encouraged. If less maintenance is desired, allow plants to reseed themselves and determine their own best location.
- Once well established, after three or so years,

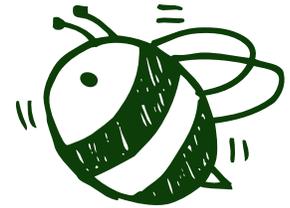


there is no need to water, or fertilize and the area can be cut just once a year in the fall or early spring (before nesting occurs). Cut only 1/3 each year so as to allow for overwintering insects to survive and seed heads to be enjoyed by wildlife. This schedule ensures that all of the meadow is cut every three years before any woody plants get well established.

- Cutting can be done with a mower or a scythe. Using a mower may require patience as the mower has to be tilted back and lowered down onto the meadow plants so as not to stall the engine or choke the blade. A scythe will make short work of this job, it just takes choosing the right blade, keeping the scythe

blade sharp and practicing the right swinging technique to let the blade do all the work.

- Reseed for any favourite native wildflowers if they haven't appeared in three or more years (and/or use some plugs). Or consider adding new seeds, if you want to introduce a few more varieties. Choose high quality with no filler and select a few specific plants rather than a "meadow seed mix", in order to guarantee that no new undesired plants will be introduced.



Links / Further Info:

Tallgrass Ontario - *A Landowner's Guide to Tallgrass Prairie and Savanna Management in Ontario* : www.tallgrassontario.org/Publications/LandownersGuide2005.pdf

Credit Valley Conservation - *Native Prairie and Meadow Gardens and Landscapes for homes, businesses and institutions* : www.creditvalleyca.ca/wp-content/uploads/2013/05/12-205-prairiemeanow-booklet-web.pdf

