



EVERGREEN  
COMMON GROUNDS

Bringing Nature to Our Cities

Common Grounds  
Fact Sheet #2

# Prairie & Meadow Communities

Prairie and meadow communities provide an abundance of colour and support a rich variety of animal-life, from birds to butterflies, dragonflies and small mammals. Canada has lost most of its native prairie communities due to agricultural and urban development.



Montgomery Meadow, Etobicoke, Ontario  
Photo by Cam Collyer

A **prairie** is a permanent upland community comprised of native grasses and wildflowers and less than 10 per cent canopy cover from trees. Prairie communities typically do not support the growth of trees because of low rainfall or periodic fires. Prairie restoration projects are encouraged in areas where those communities once existed.

A **meadow** is typically a transitional community comprised of native wildflowers and some grasses that will eventually be overtaken by trees. Some meadow communities are maintained by cycles of flooding and drought or exist on dry slopes and ridges, which does not allow for succession from meadow to forest to occur. Meadow creation projects are a good choice in areas where there is dry soil, colour is desired, tree growth is restricted (i.e. by utility wires) or open views are preferred.

This fact sheet is part of a series that provides community groups with practical hands-on information for naturalizing parks and other public spaces. The fact sheets are a companion to Evergreen's guidebook, *No Plot is Too Small: A Community's Guide to Restoring Public Landscapes*, which provides the tools to plan, implement and sustain a successful greening project.

The fact sheets in this series include:

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| 1. <i>Tips and Techniques for the Naturalized Garden</i> | 5. <i>Windbreaks, Corridors, Hedgerows and Living Fences</i> |
| 2. <i>Prairie and Meadow Communities</i>                 | 6. <i>Community Gardening - Themes and Ideas</i>             |
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| 4. <i>Pond and Wetland Habitats</i>                      |  |

# Tips for Designing Your Prairie or Meadow Community

- ☛ Prairie and meadow communities are typically found in open, sunny areas with flat to slightly rolling terrain.
- ☛ Prairie communities are typically found on drier, nutrient-poor soils, while meadow communities are found on a range of dry to moist soil types.
- ☛ Prairie communities are dependent on fire to flourish, whereas meadow communities are maintained by cycles of flooding and drought conditions.
- ☛ Prairie and meadow species do not fare well under constant wear and tear, so planned trails and seating are a good idea.



## Creating Prairie and Meadow Communities

### Preparing the Soil

Soil preparation is the key to creating successful prairie and meadow communities. More time preparing the soil will mean less weeding later and will lead to a healthier more vibrant natural community.

#### 1) *Cultivation*

- ☛ Use this method if you are planting in an old field or if your site has a lot of invasive weeds.
- ☛ Clear away any turf grass and unwanted vegetation in the area by cultivating the soil using shovels or a rototiller.
- ☛ Allow weeds to grow to a height of 10 to 15 centimetres and then manually remove them with a hoe. Repeat this until weeds are controlled.

*Some larger projects use glyphosate based herbicides to eliminate weeds. Any use of chemical herbicides, pesticides or fertilizers is not recommended due to the health risks they pose. Keep in mind, due to their smaller body size, children are much more sensitive to chemicals than adults.*



#### 2) *Black Plastic Solarization*

- ☛ Use this method when you are planting in a turf grass area. It is also less time consuming for community projects when extra hands are not available for site preparation.
- ☛ Place a sheet of heavy black plastic over the area you wish to plant.
- ☛ Leave the plastic for six to 12 weeks to ensure the grass has been killed.
- ☛ Remove the black sheets and clear away any remaining turf grass.
- ☛ Plant plugs directly in the soil, or till the area lightly with a hoe and seed.
- ☛ Weed manually for the first few weeks while your prairie or meadow species are growing. Once they are established (after one year) there will be less weeding involved.

***Do not add nitrogen, topsoil, compost or manure to the soil since prairie and meadow species can better establish and compete against weeds if the soil is lower in nitrogen.***

### Selecting Species

- ☛ Select a mix of grasses and wildflowers. Prairie communities typically have 50 per cent grasses and 50 per cent wildflowers. Meadows generally have 70 per cent wildflowers and 30 per cent grasses. You can adapt these numbers based on your specific project goals. For instance, for more colour use a higher percentage of wildflowers.
- ☛ Use either seed or plant plugs for your project, or a combination of both. Some projects have had success planting wildflower plugs and seeding native grasses. This technique allows wildflowers to develop before the faster growing grasses fill the site.
- ☛ Seed wildflowers in early to late spring (April to late May) or late fall (mid October to mid November) and grasses in early spring. These times may vary slightly depending on local climate conditions. Mix seed with sand before sowing or broadcast seeding for more even seed distribution. Complete two passes over the site, moving at right angles to each other. Rake the seed in lightly and then firmly pack the soil. Remember to not seed on windy days!
- ☛ Plant in the spring once the soil has been cultivated and weeded. Plant plugs 25 to 40 centimetres (10 to 16 inches) apart for even coverage.

## Maintenance

It typically takes two to five years to develop a prairie or meadow community. Here are a few tips:

- ☛ Water plugs as soon as they are planted. During the first year, water regularly for the first couple of weeks and then during dry periods. Plants will not require watering after they are established, even in drought cycles.
- ☛ Water seeds until they have germinated and then only during dry periods.
- ☛ Mulch plugs with biodegradable, weed-free mulch such as woodchips (three to five centimetres deep) to help control weeds and maintain soil moisture. Take care to not mulch too close to the plants because moisture can get trapped and cause rot.
- ☛ Weed regularly for the first couple of years until your prairie or meadow species become well established.
- ☛ Mow annual weeds (those that live for one year) in the spring to remove the flowers (seed heads), which once removed will not allow the plants to reproduce. Perennial weeds (those that return year after year) can cause more of a problem and will need to be carefully hand dug to ensure the whole root is taken and the soil is not disturbed to a point where exposed bare soil becomes susceptible to further weed invasion.
- ☛ Maintain your prairie community over the long-term with fire. Fires should only be conducted with the permission of your local fire department and municipality, and with the help of trained individuals. If permission to use fire cannot be granted, it is not advised to create a prairie— instead create a wildlife garden or meadow community.
- ☛ Maintain meadows by mowing and by cutting out any shrub or tree species that become problematic.



# Where to *gO* from here?

## Sources for this fact sheet

Delaney, K., Rodger, L., Woodliffe, P. A., Rhynard, G. and Morris, P.  
*Planting the Seed: A Guide to Establishing Prairie and Meadow Communities in Southern Ontario*. Downsview, Ontario: Environment Canada, Environmental Conservation Branch, 2000. Available from Tallgrass Ontario: (519) 873-4631, [www.tallgrassontario.org](http://www.tallgrassontario.org).

Morgan, John P., Collicut, Douglas R. and Thompson, Jacqueline D.  
*Restoring Canada's Native Prairies: A Practical Manual*. Argyle, Manitoba: Prairie Habitats, 1995.

## Example projects

High Park, Toronto, Ontario: (416) 392-1748; [www.city.toronto.cq/involved/vsp.vsp.htm](http://www.city.toronto.cq/involved/vsp.vsp.htm)

Living Prairie Museum, Winnipeg, Manitoba: (204) 832-0167

Nose Hill Park, Calgary, Alberta: (403) 268-3888

Rice Lake Plains, Peterborough, Ontario: (705) 755-1951

## Organizations

Nose Hill Conservation Corps: (403) 284-4920; [amandastopicals@home.com](mailto:amandastopicals@home.com)

Prairie Habitats, Argyle, Manitoba: [www.prairiehabitats.com](http://www.prairiehabitats.com)

Tallgrass Ontario, London, Ontario: [www.tallgrassontario.org](http://www.tallgrassontario.org)

## Published by Evergreen

Evergreen is a national non-profit environmental organization with a mandate to bring nature to our cities through naturalization projects. Evergreen motivates people to create and sustain healthy, natural outdoor spaces and gives them practical working tools to be successful through its three core programs: **Learning Grounds** (transforming school grounds), **Common Grounds** (working on publicly accessible lands) and **Home Grounds** (for the home landscape). We believe that local stewardship creates vibrant neighbourhoods, a healthy natural environment and a sustainable society for all.

## Evergreen's Common Grounds Program

Common Grounds brings land-use planners, landscape architects and community members together to restore public land. By supporting community greening initiatives, Common Grounds enriches ecological diversity, fosters healthy, sustainable communities and increases environmental awareness.

## Part of the Tool Shed Series

The Tool Shed is an integrated collection of resources designed to inspire, educate and guide students, teachers, planners, community groups and individuals through all stages of a school, community or home naturalization project. The Tool Shed series includes guide books, instructional and inspirational videos, fact sheets, case studies, newsletters, research reports and an on-line registry. For the latest information on Evergreen's Tool Shed resources, check out our website at [www.evergreen.ca](http://www.evergreen.ca).

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