

Ground Covers

The term ground cover refers to plants that form a thick carpet on the ground as they grow. To help you choose suitable plants, our experts have listed some of the best perennial, fern, grass and shrub ground covers at the end of this leaflet.

Ground covers can play various roles in landscaping:

- as a substitute for a lawn;
- instead of a lawn in areas where grass does not grow easily (under large trees with shallow roots, in shady, dry or wet spots, etc.);
- to cover the ground in a wooded area, on gentle slopes or on uneven areas;
- to prevent weeds from spreading;
- to hide walls or make them more attractive;
- to create group plantings within or along the edges of a border;
- to fill in the spaces between paving stones and slabs;
- to reduce evaporation and prevent erosion from wind and run-off.

Know your garden and plants' needs

The key to successful gardening lies in knowing your site's characteristics, along with the needs of the plants that may be suited to your garden. When choosing plants, it is important to keep in mind your sunlight conditions, soil moisture, hardiness zone, pH and exposure to wind.

Sunlight

Full sun

Plants receive at least six hours of direct sunlight a day.

Partial shade

Plants receive three to six hours of direct sunlight a day.

Shade

Plants receive less than three hours of direct sunlight a day.

Soil moisture

Dry soil

Quick drainage, often poor, sandy or gravelly soil, on a slope, near a ditch or under large trees

Cool soil

Good drainage, good water and nutrient retention

Wet soil

Poor drainage or in a depression, often waterlogged

Preparing the soil

It is easier for ground covers to become established in properly prepared soil. A few tips:

- Completely remove all weeds and any remaining sod
- Turn over the soil to a depth of about 15 cm

Planting

Container-grown plants can be planted at any time during the growing season. However, spring and late summer (August and September) are the best times for ground covers to become established, with their plentiful rainfall, warm days and cool nights.

How widely apart you should space your plants depends on how much they will spread once fully grown and their growth rate.

To figure out how many plants you need to cover a given space, simply divide the area to be covered by the amount of space each plant will take up once fully grown.

Example:

1. Measure the area to be covered
 $100 \text{ cm} \times 150 \text{ cm} = 15,000 \text{ cm}^2$ to be covered
2. Once fully grown, your chosen plant will have a spread of about 50 cm
 $50 \text{ cm} \times 50 \text{ cm} = 2,500 \text{ cm}^2$
3. Divide the area to be covered by the amount of space each plant will cover
 $15,000 \text{ cm}^2 / 2,500 \text{ cm}^2 = 6$

This means that you need six plants to cover an area measuring 100 cm by 150 cm.

It may help to spread organic mulch around your plants during the first few years, until they have filled in. This will help retain soil moisture and keep weed growth under control.

Tip for fast-growing plants

If you have a limited budget or a large area to cover, you can plant from seed or buy only a small number of plants, place them in the ground and allow them to grow for a year or two. Once they have spread, you can divide them and plant them in the remaining spaces.

Maintenance

Maintaining ground covers involves three simple steps:

1. Watering

In the year after planting, check the soil regularly and water it deeply when it begins to dry out. Watering frequency will depend on the site, soil composition, temperature, exposure to wind and amount of rainfall.

Once established, ground covers growing in suitable settings need to be watered only during extended droughts. Avoid frequent, shallow waterings and remember that overwatering is more damaging than allowing the plants to dry out temporarily.

2. Fertilizing

For plants that require rich soil, work in a 2.5 cm layer of compost around the base of the plants every year.

3. Weeding and division as necessary

Remove weeds as they appear to prevent them from spreading.

Some ground covers become less vigorous after a number of years. To revitalize them, divide clumps in spring or fall.

Selecting species

The following table lists plants with attractive textures, shapes or colours and requiring little maintenance. They are also resistant to insect pests and diseases. Most of them are readily available from Quebec gardening centres.

	Sunlight			Soil		
	Full sun	Partial shade	Shade	Dry	Cool	Damp
Perennials						
<i>AEGOPIDIUM PODAGRARIA 'VARIEGATUM'*</i>	X	X	X		X	X
<i>Ajuga reptans</i> and cvs	X	X	X		X	
<i>Alchemilla mollis</i>	X	X	X		X	X
<i>Arabis</i> spp. and cvs	X				X	
<i>Aruncus aethusifolius</i>	X	X	X		X	X
<i>Asarum canadense</i>		X	X		X	
<i>Astilbe chinensis</i> 'Pumila'		X	X		X	
<i>Aurinia saxatilis</i> and cvs	X			X	X	
<i>Bergenia</i> spp. and cvs	X	X	X		X	X
<i>Brunnera macrophylla</i> and cvs		X	X		X	X
<i>Cerastium tomentosum</i>	X			X	X	
<i>Convallaria majalis</i> and cvs *		X	X		X	X
<i>Dianthus deltoides</i> and cvs	X			X	X	
<i>Dicentra formosa</i> and cvs		X	X		X	
<i>Epimedium</i> spp. and cvs	X	X	X			X
<i>Euphorbia cyparissias</i> *	X	X		X	X	
<i>GALIUM ODORATUM</i>		X	X	X	X	
<i>Gypsophila repens</i> and cvs	X			X	X	
<i>Heuchera x brizoides</i> and cvs		X			X	
x <i>Heucherella</i> cvs		X	X		X	
<i>Hosta</i> spp. and cvs	X	X	X		X	
<i>Lamiaeum galeobdolon</i> and cvs *		X	X		X	
<i>Lamium maculatum</i> and cvs		X	X		X	
<i>Lotus corniculatus</i> 'Plenus'	X			X		
<i>Lysimachia nummularia</i> and cvs	X	X			X	X
<i>Mazus reptans</i>		X	X		X	
<i>Myosotis scorpioides</i> 'Semperflorens' *	X	X			X	X
<i>Oenothera macrocarpa</i>	X			X		
<i>Pachysandra terminalis</i>	X	X	X	X	X	X
<i>Phlox subulata</i>	X	X			X	
<i>Pulmonaria</i> spp.		X	X		X	
<i>Sedum kamtschaticum</i>	X	X		X		

<i>Sedum spurium</i> and cvs	X	X	X	X		
<i>Stachys byzantina</i>	X				X	
<i>Thymus serpyllum</i> and cvs	X			X		
<i>Tiarella cordifolia</i>	X	X	X		X	X
<i>Veronica prostrata</i>	X				X	
<i>Vinca minor</i> and cvs	X	X	X	X	X	
<i>Waldsteinia ternata</i>	X	X	X	X	X	
Ferns						
<i>Cystopteris bulbifera</i>		X	X		X	
<i>Matteucia struthiopteris</i>	X	X	X			X
<i>Onoclea sensibilis</i> *	X	X	X		X	X
<i>Thelypteris nevoboescensis</i>		X		X	X	X
<i>Thelypteris palustris</i> *	X	X	X	X	X	X
<i>Thelypteris phegopteris</i> *	X	X	X	X	X	X
Grasses						
<i>Carex flacca</i>	X	X	X			X
<i>Carex nigra</i>	X	X			X	X
<i>Luzula sylvatica</i> and cvs		X	X	X	X	X
Shrubs						
<i>Arctostaphylos uva-ursi</i> and cvs	X	X	X	X	X	
<i>Cornus sericea</i> 'Kelseyi'	X	X				X
<i>Cotoneaster dammeri</i> 'Lowfast'	X	X			X	
<i>Cytisus decumbens</i>	X			X		
<i>Euonymus nanus</i>	X			X		
<i>Genista pilosa</i> 'Gold Flash'	X			X		
<i>Hedera helix</i> 'Bulgaria'	X	X	X		X	
<i>Hypericum frondosum</i> 'Sunburst'	X	X		X		
<i>Juniperus horizontalis</i> and cvs	X			X	X	
<i>Microbiota decussata</i>	X	X	X	X	X	
<i>Pinus sylvestris</i> 'Hillside Creeper'	X				X	
<i>Rosa</i> 'Alba Meidiland'	X				X	
<i>Rosa</i> 'The Fairy'	X				X	
<i>Salix repens</i> 'Voorthuizen'	X	X				X
<i>Spirea japonica</i> série 'Carpet'	X				X	
<i>Stephanandra incisa</i> 'Crispa'	X	X	X		X	

Legend:

* This plant is considered invasive.

The abbreviations **spp.** and **cvs** indicate that **various species** and **cultivars** may be suitable.

Further reading

Books in English

Bennett, J. *Ground Covers*. Camden East, ON: Camden House Editor. A Harrowsmith Gardener's Guide. 1987. 96 p.

Daniels, S. *Easy lawns: Low maintenance native grasses for gardeners everywhere*. Brooklyn, NY: Brooklyn Botanic Garden, (21st-Century Gardening Series / Handbook 160). 1999. 112 p.

Taylor's Guide to Ground Covers, Vines and Grasses. Boston: Houghton Mifflin Editor. Taylor's Guides to Gardening. 1987. 496 p.

Thomas, G. S. *Plants for Ground Cover*. Portland, OR: Sagapress/ Nagaere A. Macray/Timber Press, 1990. 380 p.

Books in French

Mondor, A. *Techniques de jardinage*. Montréal: Éditions de l'Homme. 2003. 359 p.

Mondor, A. *Jardins d'ombre et de lumière*. Montréal: Éditions de l'Homme. 1999. 256 p.

Hodgson, L. *Les vivaces*. Coll. Le jardinier paresseux. Ottawa: Éditions Broquet. 1997. 543 p.

Hodgson, L. *Les arbustes*. Coll. Le jardinier paresseux. Ottawa: Éditions Broquet. 1997. 616 p.

Barone, S. and F. Oemichen. *Les graminées*. Montréal: Éditions de l'Homme. 2001. 206 p.

Smeesters, E. *Pelouses et couvre-sols*. Ottawa: Éditions Broquet. 2000. 207 p.

Fortier, S. *Alternatives écologiques à la pelouse*. Les Éditions Serge Fortier. 2005. 327 p.

Most of these documents are available for consultation at the Montréal Botanical Garden library.