



LAWN SHARE Toolkit



From Lawn Care To LawnShare

Traditional ornamental turfgrass lawns are of the most prominent landscapes in Canadian towns and cities. While lawns play an important role in outdoor recreation and leisure, they consume vast amounts of water, soil and space and provide little ecological value. LawnShare aims to change the way people care for lawns *and* help transform them into much-needed habitat — sharing these spaces with local insects, plants and other wildlife.

We developed this guide to support households, agencies and companies changing their lawn care habits and thousands of people in Canada reimagining these spaces as habitats. It provides simple, cost-saving tips for lawn care with less impact on local water, air and soil, plus guidance on turning these spaces into habitat that support native plants and wildlife.

LawnShare Goals:

- Reduce water, fertilizer and pesticide use
- Curtail noise, air, soil and water pollution
- Support wild plant, insect and animal species
- Establish new relationships with nature

We review this guide annually and welcome your feedback.
Please email contact@davidsuzuki.org.

LawnShare is a collaboration between Nouveaux Voisins, the David Suzuki Foundation and Dark Matter Labs.
Special thanks to the Rewilding Communities national program partner, Cascades.

Top Tips For Healthy Lawns

Though most lawns sit empty, people spend billions of dollars each year on services and products to groom them, including fertilizers, water, equipment and fuel. Some uses, like sports fields, require even more maintenance. This can be hard on the wallet *and* the environment.

Fortunately, people can maintain healthy lawns using minimal water and fuel and without investing in harmful chemicals. This section includes options for maintaining an existing lawn and establishing a new one. If you're also interested in reducing the size of your lawn and establishing habitat, check out Section 2.

BEST PRACTICES FOR EXISTING LAWNS

Every lawn is unique. When deciding on grass species and lawn maintenance, consider soil conditions, sun exposure and how you use your lawn. Below are general tips for maintaining a healthy lawn that's safe for all living things. Check your local municipality, gardening clubs and organic lawn care providers for more information.

Mow Better

- **Raise your blade:** A lawn height of 7.5 cm (about three inches) or more will encourage deep root growth and shade soil to reduce drought and discourage weed seed germination.
- **Get a clean cut:** Regularly sharpen your blade to help prevent plant diseases.
- **Mow less:** Avoid mowing in dry periods. It's stressful for the grass and unnecessary work for you.
- **Ditch gas:** Replace a gas-powered mower with quieter and less-polluting push or electric mowers.

Feed Soil

- **Leave clippings:** Their natural decomposition returns nutrients and moisture to the lawn.
- **Add compost:** Do this in spring and fall to add important nutrients to the soil.
- **Go natural:** Avoid chemical fertilizers that can burn grass and pollute soil and water.

Overseed

- **Overseed once a year:** Apply new grass seed in early spring or mid- to late fall to maintain a thick turf that will crowd out weeds and keep soil shaded from the hot sun.
- **Drought-resistant grasses:** Seed with hardier grass species, such as perennial ryes and fescues, or alternative seed mixes like the ones in the LawnShare Seed Mix table at the end of this toolkit.

Water Smarter

- **Let it brown:** Allow established lawns to go dormant in dry periods, a natural occurrence for grasses. If your lawn is new or if a dry period persists for many weeks, water to a depth of 2.5 cm (one inch) in the early morning or early evening.
- **Water by the rules:** Adhere to your municipality's watering restrictions. Avoid watering at night as cooler temperatures and sitting water invite disease.

Find additional information and best practices at the end of this document. Contact your local municipality and gardening clubs for more tips and resources.

NEW LAWN BEST PRACTICES

Establishing a new lawn? You have two options: sod or seed.

Sod provides immediate cover but is more expensive and is often mostly Kentucky bluegrass, a species that requires much more fertilizer and water than other grasses. If you go with sod, consider overseeding with perennial rye and fescue grass seed in future years to create a more drought- and pest-resistant lawn.

If you're using seed, you can buy multi-species mixes or separate grass species to combine yourself. Starting with seed is less expensive but will require more effort and patience.

Alternative Seed Mixes

There are several alternative lawn seed mixes that have been developed to replace the conventional high-maintenance lawns in Canada. Some result in a landscape that closely resembles a conventional lawn. Others will create a taller, more diverse landscape. Research and development are ongoing as governments, companies and customers respond to environmental issues.

For information about seed mixes, check out the LawnShare Seed Mix table at the end of this toolkit.

Information presented in the table comes from seed companies. Contact them directly for availability, pricing and instructions. The list will be updated regularly. If you discover other mixes that should be added, please email us at contact@davidsuzuki.org.





From Lawn To Habitat

Taking the steps outlined in the previous section will help reduce the negative environmental impacts associated with a traditional lawn. This section provides guidance on how to replace lawn (partially or entirely) with habitat that will support local plant and animal species, including bees and butterflies. As a bonus, habitat gardening opens human hearts and minds and enhances our connection to nature.

HABITAT GARDENS AND NATIVE PLANTS

Habitat gardens have become more common over the past decade. Known by many names, including “pollinator patch,” “wildlife garden” and more, these gardens contain native plants and are maintained in such a way to support insects (and more!) at all stages of life and through all seasons.

A **native plant** is a species that has existed in an area for millennia and has co-evolved along with other native species of plants, animals, fungi and bacteria in the presence of native soil and climatic conditions.

Native plants are foundational to ecosystems. They provide food, shelter and nesting materials for a diversity of insects, birds, mammals, amphibians and reptiles at all stages of their lives. Many insects are specialized, meaning that they feed on one or a small number of native plants only. The monarch is our most famous specialist. Female butterflies lay their eggs on native milkweed plants and emerging caterpillars consume milkweed leaves exclusively.

Native plants are also tied to Indigenous cultures, used for food, fibre, medicine and ceremony.

Despite their beauty and ecological importance, native plants are underrepresented in our gardens, most of which are dominated by **non-native plants** that provide fewer ecological benefits. Because they’re foreign to native insects, gardens and neighbourhoods filled with non-native plants have fewer insects and fewer birds and other animals that rely on insects for food. Research by University of Delaware professor Douglas Tallamy and students confirms that more than 96 per cent of terrestrial birds raise their young on insects.

- **Native plant:** Has co-evolved with local species, soils and climate in a region over millennia.
- **Non-native plant:** Was brought into an area by humans.
- **Invasive plant:** A non-native plant that spreads to the detriment of native species, ecological functions and/or human health.

TIPS FOR HABITAT GARDENING

Native plants are the foundation of habitat gardens. Add a diversity of woody and soft-stemmed native plants suited to your sun and soil conditions. Aim for a succession of blooms throughout the seasons, so that pollen and nectar are available to pollinators from spring to fall, e.g., pussy willow is a flowering shrub that supports pollinators in the spring, while goldenrod and aster species support them through late summer and fall.

Include natural debris — dry leaves, dead stems, fallen logs and standing dead trees (unless a safety hazard). What may seem messy to some people is habitat to wildlife, especially overwintering insects. Birds also require natural debris, such as dry grass and vine tendrils, to build their nests in spring.

HOW TO TRANSFORM YOUR LAWN

This section is for anyone aiming to replace lawn with a habitat garden.

First remove the turf grass. When deciding which technique is best, consider the time of year, the size of the lawn you're removing, the physical ability of those involved in the work, and available equipment and funds.

Some turf grass removal options:

- **Cover:** Cover your lawn with overlapping layers of damp cardboard or newspaper, followed by topsoil, compost or mulch. Do this the preceding fall — allowing the grass to die and the paper to partially decompose — or a couple weeks before planting. This method is easy on your body and wallet as well as soil community and structure.
- **Flip:** Cut out small squares of turf and flip them over so the soil faces up. Add topsoil and compost, making sure no grass is exposed. You can plant right away. This method is faster but requires more physical effort and disrupts soil community and structure. In addition, you will need to remain vigilant for turfgrass sprouts.
- **Remove:** Got a large lawn to remove? If you have the funds, hire a company or rent equipment. This method also disrupts soil community and structure but is the quickest way to start fresh.

FOOD GARDENS

Food gardens are another great alternative to lawns. Growing your own food can be satisfying and fun. Find free resources online, at public libraries and through local garden clubs.

CHALLENGES

Habitat gardening is growing in popularity throughout Canada, with varied levels of support from neighbours, municipal governments and the horticultural industry. Here's a list of potential challenges:

- **Limited availability of native seed and plants:** Finding native plants in big box stores and commercial nurseries can be hard. See the resources section for links to sources lists and maps, and for tips on growing native plants from seed.
- **Neighbours' expectations:** Lawns are still the default landscape for most. Before changing yours, consider speaking to your neighbours about your motivations and address any concerns they may have. You can also put up a sign to inform passersby that your garden is providing habitat for native species of plants and animals, including pollinators.
- **Outdated and inconsistently enforced municipal bylaws:** Each municipality has its own version of a grass and weed bylaw intended to uphold a standard of private property maintenance. Unfortunately, that standard is based on an outdated view of gardens and lawns that favours a neat and tidy appearance over ecological value. These bylaws may deter gardeners from exercising their legal right to create and maintain habitat on their properties. Check your municipality's bylaws and policies, so you are equipped with facts if a disapproving neighbour or bylaw officer stops by.



Lawn Care and Habitat Gardening Resources

The resources listed below provide information on better lawn care, habitat gardening, native plants and pollinators in Canada. Some — including plant lists — are region-specific, but much is practical advice all people in Canada can apply. Local gardening and nature clubs and native plant nurseries may have more.

Healthy lawn care

- **How to grow a healthy lawn** Toronto Region Conservation
- **How to care for your lawn & Be YardSmart** City of Calgary
- **Lawn tips** Metro Vancouver
- **Maintaining a lawn & How to have a healthy lawn** Government of Canada

Habitat garden programs, guides and plant lists

- **Ecoregional Planting Guides** Pollinator Partnership
- **Gardening for Wildlife program and resources** Canadian Wildlife Federation
- **In the Zone Gardens program and resources** Carolinian Canada & WWF Canada
- **Gardening with Native Plants** Fraser Valley Conservancy

Native plant databases

- **Native Plant Database** North American Native Plant Society
- **Find Your Roots** Pollinator Partnership
- **Plant Species Database** Network of Nature
- **Native Plant Encyclopedia** Canadian Wildlife Foundation

Seed and plant sources

- **Native Plant Suppliers** Canadian Wildlife Federation
- **Commercial Native Plant Growers** North American Native Plant Society
- **Native Plant Seed Exchange** North American Native Plant Society
- **Native Plant Nursery Finder** Network of Nature

Growing from seed resources

- **Growing native plants from seed** Cliffcrest Butterflyway
- **Seed-starting basics guide** Prairie Moon Nursery
- **Growing from seed guide** Toronto Master Gardeners
- **Seed Sitters resources** David Suzuki Foundation

Invasive species resources

- **Provincial invasive species councils** Canadian Council on Invasive Species
- **Grow Me Instead guide for Manitoba, Ontario, Alberta**
- **Plant Wise guide** Invasive Species Council of BC

Seed mix

PRODUCT	DESCRIPTION	HEIGH	MOWING	FERTILIZER	WATER	PREFERRED CONDITIONS	REGIONAL APPLICATION
Wildflower Farm Eco-Lawn*	A blend of five fine fescue grasses that form a slow growing, drought tolerant turf with a deep green colour.	10 cm/ 4 inches	Recommended once in spring and once in fall	Not recommended	Not necessary once established	Full sun to deep shade; all soil types	Across Canada
Northern Wildflowers Easy- to-grow Wildflower Seed Mix	A mix of native wildflower and grass species with spring, summer and fall-blooming species in a variety of colours.	1 to 1.5 m/ 3 to 5 feet	Recommended once in fall for first three years	Not recommended	Not necessary once established	Full sun; all soil types	Large area of ON, parts of MB, QC and NB
St. Williams Low Grow Ground-Covering Seed Mix	A mix of short native grasses, wildflowers and sedges for lawns or rooftops.			Not recommended	Not necessary once established	Full sun; dry to moist soil	Southwestern Ontario
OSC Mini Mow Ecological Lawn Seed Mixture*	Ground cover mixture of hardy non-native perennials and one self-seeding annual that requires minimal maintenance once established.	15 to 45 cm/ 6 to 17 inches if unmowed, but can be mowed	Recommended twice a year	Not recommended, except for annual compost application	Not necessary once established	Full sun; all soil types except heavy clay	Most of Canada
OSC Xeriscaping Ecological Lawn Seed Mixture*	A mix of white clover and yarrow, two drought-tolerant perennial groundcovers.	7 to 15 cm/2.75 to 6 inches	Not necessary but possible	Not recommended	Not necessary once established	Sun; most soil types	Most of Canada
William Dam Seeds No-Mow Blend*	A mix of fine fescues that form mounds when left unmown but can still be mowed if desired. Wildflowers can be added as fescues will not choke them out.	Mow to desired height	Mow to desired height	Optional once established	Water when seeding and during times of drought	Sun to partial sun; most soil types	Canada-wide
William Dam Seeds Eco-Alternative* Blend	A mix of hardy grass varieties and legumes that creates a dense lawn tolerant of mowing and foot traffic and resistant to drought, chinch bugs and grubs.	Mow to desired height	Mow to desired height	Optional once established	Water when seeding and during times of drought	Sun to partial sun; most soil types	Canada-wide
William Dam Seeds Low Maintenance Mix*	A mix of low-maintenance fescue and perennial rye grasses. Ideal for large lots that are irregularly watered or weeded.	Mow to desired height	Mow to desired height	Optional once established	Water when seeding and during times of drought	Sun to partial sun; most soil types	Canada-wide

* These seed mixes are appropriate for overseeding existing lawns.