

Creating Biodiversity in your Yard: A How-To Guide



UNIVERSITY OF SASKATCHEWAN

College of Agriculture
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AGBIO.USASK.CA



Native Plant Society
of Saskatchewan



City of
Saskatoon

What is Biodiversity?

Biodiversity—or biological diversity—refers to the variety of all living things on earth. On a small scale, it represents the diversity of plants, animals, insects and microorganisms found in your yard.

Habitat loss is one of the greatest threats to biodiversity worldwide, but we can all do our part by creating biodiversity in our yards and communities.

Plant Selection

No matter what type of garden you have, native plants make an excellent addition.

- Native flowers, trees, shrubs, grasses and groundcovers all create natural habitat and provide food sources for local wildlife. Some examples include: Saskatoon berry, dogwood, willow, sage, wild blue flax, coneflower, crocus, gaillardia, wild columbine, and aster. For a detailed list, contact the Native Plant Society of Saskatchewan (npss.sk.ca).
- Purchase from a native plant supplier to ensure you receive quality plants that are actually native to the prairies (and not simply horticultural varieties). For a list of all the native plant and seed suppliers in western Canada, visit npss.sk.ca.
- Before planting exotic species (plants that are not from Saskatchewan), consider if there are native alternatives that provide similar qualities.
- Do not grow invasive or aggressive plants that have the potential to take over your garden and spread throughout your community. For a list of regulated weeds, visit saskinvasives.ca.
- If growing fruits or vegetables, choose heritage and heirloom varieties that are rare or endangered. Save seeds to preserve these plants for future generations.

Create Habitat

To create habitat for a diversity of birds, insects and other wildlife:

- Include natural materials in your garden design, such as unbagged leaves, rocks, logs, mulch, compost piles, and dead trees. These materials provide a variety of species with places to lay eggs, raise offspring, and take shelter.
- Add bird houses, bird feeders, bat houses, and bee hotels to attract beneficial wildlife.
- Add sources of water to your landscape, such as bird baths, fountains, or ponds. Keep water features clean and avoid standing water.
- Apply organic mulch, such as woodchips or leaves, around the base of your trees, shrubs, flowers, and vegetables.
- Reduce “monoculture” plantings (areas with a single type of plant, such as lawns) and increase “polyculture” (areas with a diversity of plants). A greater diversity of plants will attract a wider variety of birds, insects, and wildlife, as well as reduce your need for pesticides and fertilizers.
- Integrate plants of different heights and features. For example, large trees provide great habitat for birds, fruit-bearing shrubs are a food source for many types of animals, while nectar-producing flowers attract butterflies and hummingbirds.
- And remember, if you would like to attract certain birds, insects, or animals to your garden, you will have to provide food, water, and shelter that meet their specific needs.





Start With Soil

Every plant has different soil needs. Therefore, consider the following:

- Many native plants do well in poorer soils, including sandy soils. Therefore, compost is not required.
- Shade-tolerant native plants will benefit from a layer of mulch, while sun-loving native plants will only tolerate a thin layer.
- In areas where non-native plants are growing, apply compost and organic mulch to enrich your soil and help your plants thrive. See our *Compost Bins* and *Mulch & More* How-To Guides for details.
- Whether you are growing native and/or non-native plants, pesticides and fertilizers are not recommended.

Protect Insects, Birds, and Wildlife

- Insects, birds, wildlife and soil microorganisms are very sensitive to chemicals, such as pesticides and fertilizers. If you wish to create biodiversity in your yard, take up chemical-free gardening practices.
- To protect birds, insects and small animals, keep your cat inside during the night and after filling up the bird feeder. Before letting your cat outside, attach a bell to its collar or put it on an outdoor leash.
- Keep your outdoor lights off during the night. Many species are nocturnal and require full darkness for hunting, mating and survival.

Naturalize Your Lawn

One of the biggest ways you can support biodiversity is to integrate native grasses, flowers, and alternative groundcovers into your lawn. For example, clover and creeping thyme are good non-native choices, while yarrow, pussytoes and blue-eyed grass make excellent native groundcovers.

If mowing is required, leave your grass or groundcover two to four inches tall and let some of your plants go to seed each year.

Maintenance

Contrary to popular belief, native plants do not require extra care to establish. Young plants (also known as “plugs”) generally establish in one year if they are planted in the spring. If you would prefer not to wait for plants to mature from seed, planting native plugs is a good choice.

Once established, native plants are easier to maintain than other perennials. They are hardier, more pest and disease resistant, and require less water, and no pesticides or fertilizers.

Later in the season, as your plants go to seed, collect seeds and plant them in areas where you’d like new plants to become established.



Other Considerations

- Enjoy an all-season garden by planting tall native grasses, growing trees and shrubs with attractive bark or berries, and adding potted plants to your indoor and outdoor living spaces.
- Research gardening techniques that incorporate biodiversity and native plants, such as xeriscaping and permaculture.
- Support biodiversity in your community by getting involved with community gardens and preserving natural areas.



Gardening at the U of S

For gardening classes for the beginner through to certification, go to gardening.usask.ca. Take a class, join a free horticultural tour, or enrol in our Gardening 101 series to walk you through your first year.

City of Saskatoon

Having a healthy yard and garden benefits you and your community. For tips on water conservation, backyard composting, pesticide reduction, and more, visit saskatoon.ca/healthyyards.

Questions?

Get free, local gardening advice from the University of Saskatchewan's Gardenline at gardenline.usask.ca year round. During the growing season contact a horticulturist for personalized advice at gardenline@usask.ca.

Community gardening can be an excellent option for every type of gardener, particularly those with limited garden space. To join an existing community garden, or to start one yourself, visit: chep.org/en/programs/community-gardening.

Grow a Greener Saskatoon