



Abiya (Abi) Saeed provides tips on winterizing gardens and home landscaping.

he growing season is wrapping up in Montana, and gardeners are preparing landscapes for the approaching winter. Fall care doesn't necessarily mean the end of the gardening year - and can in fact act as a critical component of reflecting on current landscaping projects and setting up a successful upcoming year.

The following checklists offer general tips for winterizing gardens. For more information, contact your local MSU Extension office.

CONTAINERS

- Bring container plants indoors for the winter. Leaving containers outside (especially clay and ceramic ones) can cause them to crack and break.
- Don't forget to sanitize containers to prevent pest/disease problems before reusing them and/or introducing them to household plants.

VEGETABLE GARDENS

 Remove and destroy diseased plant material. Composting diseased plant

- material can keep pathogens alive, which could re-introduce them to the garden, causing problems in the following growing season.
- Add organic matter to restore nutrients to the soil (use compost, manure, leaves/straw, etc.). Consider getting soil tested in spring (prior to planting), especially if there were any growth or fertility issues during the growing season. A soil test will give detailed information about soil nutrient profiles to plan for the appropriate soil amendments.
- Root crops can remain in gardens longer, but they need to be protected from freezing temperatures and frost damage. Using mulches like weed-free straw and leaves can keep the soil at more consistent temperatures through the colder months.
- Keep a garden notebook, and use that to reflect on garden projects throughout the growing season. Take note of which produce worked well in the landscape and use this as a

starting point for planning next year's vegetables. Make sure to rotate crops to prevent buildup of pests/disease, and leave a 3–4 year break between planting the same family of crops at the same site.

TREES, SHRUBS AND HERBACEOUS ORNAMENTALS

- Remove annuals from the garden after they complete blooming. Annuals will not re-bloom the following year.
- Use existing leaflitter or straw to mulch perennial and biennial beds, especially in areas of Montana with limited snow cover throughout the winter. This can help insulate the roots of more sensitive plants.
- Protect sensitive plants through the winter (from the cold, wind, and vertebrate pests). Certain plant wraps can be used to protect younger perennials from hungry herbivores as they search for food in the winter. Wraps and tree paints can also be used on thin-barked trees to prevent sunscald/Southwest injury. It is important to remove any wraps when temperatures begin to warm in the spring because they can restrict plant growth and cause accumulation of pests and disease if left unchecked.
- Water trees and shrubs into the fall, or as long as possible while temperatures are above freezing and snow cover is limited. Many trees and shrubs (especially evergreens) are susceptible to winter desiccation, especially on warm, sunny winter days when they continue to transpire, and lose moisture at a much faster rate than can be replenished.
- Clean up weeds, and always read and follow label directions if using herbicides.
- Blow out the water from the irrigation system at the end of the season to prevent freezing breaks. Refer to a professional if this is something you're not comfortable doing on your own.

LAWNS

- Fertilize lawns as late as the first part of October (or about four weeks prior to soil freezing). Apply 1 pound of nitrogen per 1000 square feet.
- Core aerate lawns to loosen any hard soils, reduce thatch, and encourage rooting (especially if there is a lot of thatch accumulation).
- Add a top-dressing of compost to poor soils.
- The last mowing of the season should take winter conditions into consideration:
 - In an area receiving plenty of snow cover, mow grass shorter (about 1.5 inches) to prevent snow mold.
 - If there is limited snow cover on lawns over winter, mow grass longer (about 3 inches) to protect the crowns from winter desiccation.
- Winter is a great time to take inventory
 of garden tools, and make sure they are
 in good shape for the following year.
 Remember to sharpen lawn mower
 blades before the garden to-do list gets
 too long in the spring.

BENEFICIAL ARTHROPODS

There are things to do (or more accurately NOT do) during fall garden cleanup to encourage beneficial insects and other arthropods in landscapes. Having a healthy population of these organisms (including pollinators and natural enemies of common pests) can increase a garden's success and help limit pest problems in the future.

- Don't cut back all the perennials until later in the spring. The stalks and plant material can provide critical nesting habitat for cavity-nesting bees and an anchor point for butterfly pupae. In addition, seed heads of many perennial plants provide fall/winter food for birds and other pollinators.
- Leave the leaves. Leaflitter is an important source of food and habitat for many invertebrates including slugs, snails, and millipedes that decompose this material into organic matter. Beetles, centipedes, spiders, and other natural enemies of garden pests will also use this as overwintering habitat. Unlike most other native bees, bumble bees overwinter in loose soil and leaf debris so unraked garden beds actually provide a home for a plethora

- of overwintering critters that play important roles in a yard and garden ecosystem. Don't leave excess quantities of leaves in the lawn; rake these and use them as mulch over tender ornamentals or biennial crops.
- Don't cover garden beds with a thick layer of heavy mulch (such as wood, plastic, or rocks) or till the soil in the fall. Ground nesting bees (which comprise 70% of our native bee species) use the patches of bare soil as shelter.

Additional Information

Nesting and overwintering habitat for beneficial arthropods: https://xerces.org/publications/fact-sheets/nesting-overwintering-habitat

Lawn care for Montana landscapes:
https://apps.msuextension.org/mont-guide/guide.html?sku=MT202004AG

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