

5. Encourage biodiversity with a variety of plants and habitat elements. Diverse planting can increase garden health, support small wildlife and reduce pests.

6. Conserve energy and protect air quality by using hand tools or electric tools that do not release emissions. Conserve energy by being efficient in planning your garden.

7. Produce an abundance and share with your neighbors. Grow flowers, herbs, vegetables, berries, medicinal plants and plants that attract pollinators.

8. Make no waste by keeping organic material on site. Compost fallen leaves, garden debris and other organic material. What else can you repurpose?

9. Cultivate beauty and calming natural spaces for reflection and enjoyment year-round.

Phipps Top 10 Sustainable Plants for 2019

Non-invasive, self-sufficient, and disease and pest resistant plants

1. Kentucky Coffeetree
(*Gymnocladus dioica*)
2. Chinkapin Oak
(*Quercus muehlenbergii*)
3. Smoketree
(*Cotinus coggygria* 'Young Lady')
4. Weigela
(*Weigela florida* 'Alexandra')
5. Fern-leaf Yarrow
(*Achillea filipendulina*)
6. Bluestar
(*Amsonia hubrichtii*)
7. Swamp Milkweed
(*Asclepias incarnata*)
8. Japanese Painted Fern
(*Athyrium nipponicum*)
9. Ostrich Fern
(*Matteuccia struthiopteris*)
10. Mountain Mint
(*Pycnanthemum virginianum*)



SUSTAINABLE LANDCARE PRINCIPLES AND PRACTICES



Sustainable Landcare:
Caring for the land in a way that mimics natural systems and creates healthy soil, plants and people.

phipps.conservatory.org/landcare

Sustainable Landcare Principles

1. Be observant to decide the best placement of gardens and the most suitable plants, and to spot pest and disease concerns before they become problems.

2. Grow healthy plants — plants that are appropriate to your yard, native, sustainable, and resistant to disease and pests. Follow proper planting, watering, mulching and pruning practices.

3. Build and maintain healthy soil with compost and mulch to protect plants and provide them with soil full of minerals and nutrients.

4. Conserve water and protect water quality with rain barrels, rain gardens, berms, plants and healthy soil. Avoid synthetic pesticides and fertilizers.

Plant Choice

- Select healthy-looking, native and sustainable plants, free of and resistant to pests and disease.
- Choose the right plant for the right place for long-term health and sustainability of the planting.

Watering

- Early watering (before 10 a.m.) discourages disease.
- Water when significant rainfall is not expected and/or when soil is dry near the roots.
- Overwatering can drown roots, promote growth of water-loving weeds and bacterial and fungal diseases, and encourage slugs.
- Water at the plant's roots, not on leaves and stems.
- Water deeply. Plants need at least 1" of water per week, including rain.
- Mulch to keep soil moist.

Planting: Containerized and Balled and Burlapped (B&B)

- Dig a hole 2 – 3 times as wide as the plant and as deep as its roots so it sits at ground level with root flare exposed.
- Shear off outside roots if compact and showing signs of being root bound.
- Remove most of the cage and burlap from B&B trees.
- Place plant in hole, pack soil around it and cover with mulch.

Planting: Bare Root

- Plant within 24 hours.
- Prune damaged, broken or blackened roots
- Rehydrate roots by soaking for several hours or overnight.
- Dig a shallow, tapered hole 1½ to 3 times the width of the root mass and at the proper height. Fill the hole with water and let it drain. Cover with soil and pat firm.

Mulching

- Untreated, un-dyed mulch helps prevent weeds, retain water and enrich soil over time.
- Apply a layer of newspaper or cardboard under mulch.
- Shred or mow fallen leaves and apply a layer to garden beds.
- Mulch at a depth of 2" for herbaceous plants and 3 – 4" for trees and shrubs.
- Begin mulch 3" from trunk and extend 3 – 6' from trunk, covering and protecting plant roots.

Pruning

- Prune (including crossing branches and suckers) in the late winter when plants are dormant.
- Remove diseased, dead or damaged branches any time.
- Cut at the branch collar; use a three-cut method for large branches.

Weeds

- Plant groundcovers or perennials to shade out weeds.
- Hand-pull weeds before they go to seed in place of a chemical weed killer.
- Taproot weeders, hoes, forks and soil cultivators can assist with physical weed removal.

Pests

- Pest control should be minimal in a sustainable system; few garden bugs are problematic pests.
- Inspect regularly for pests to catch problems early, then remove with water or by hand.

Disease

- Correctly identify pests and diseases; consult a professional if needed.
- Disinfect tools with alcohol to avoid spreading disease.
- Prune diseased plant parts.