

# **Eco-Friendly Lawn Care Ideas**

LLPOA Lake Committee - 2024

# What Each of Us Can Do - Homegrown National Parks - Doug Tallamy

https://www.homegrownnationalpark.org/wp-content/uploads/2023/05/SHRINKTHELAWN.pdf for complete article

### 1. SHRINK THE LAWN

 Every square foot dedicated to lawn is a square foot that is degrading local ecosystems. Turfgrass offers no ecological benefits but is nice to walk on. Reduce lawns by half for walkways and paths that define beds, & groves.



### 2. REMOVE INVASIVE SPECIES

Invasive plants are ecological problems that spread
unchecked into our ecosystems, limiting the ecosystem's ability to function. If property owner removed the
most egregious invasives, the goal of ridding these troublemakers, or at least reducing their seeds spreading
to manageable levels, would be largely realized.

### 3. PLANT KEYSTONE GENERA

Research at the University of Delaware has shown that a few genera of native plants, or keystone genera, form the backbone of local ecosystems by producing the food that fuels insects. Landscapes that do not contain keystone genera will have failed food webs. Find the keystone plants that host the most caterpillars and native bees: <a href="https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion">https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion</a>

### 4. BE GENEROUS WITH YOUR PLANTINGS

• To realize the ecological potential of our landscapes, most of us have to increase the abundance and diversity of our plantings. If you have one tree in your yard, consider adding two more. The idea is to plant groves of trees at the same density at which they occur naturally in a forest.

### 5. REDUCE YOUR NIGHTTIME LIGHT POLLUTION

Porch and security lights are major causes of insect decline. Consider turning off your lights at night, or use
motion sensor security lights that light up only when someone enters your yard. Replace the white bulb in
your lights with yellow tinted LED bulbs because yellow wavelengths are least attractive to nocturnal insects.

### 6. NETWORK WITH NEIGHBORS & THE HOMEGROWN NATIONAL PARK® MAP

Be a role model for your neighbors by planting natives in tasteful ways. Maybe your neighbors will follow suit.
 Add your yard to Homegrown National Park® MAP to begin the process of building ecological networks and move toward the national goal of replacing 20 million acres of lawn. <a href="https://map.homegrownnationalpark.org">https://map.homegrownnationalpark.org</a>

### 7. BUILD A CONSERVATION HARDSCAPE (you don't have to be a gardener!)

- Set your mower height no lower than 3 inches. This will give you healthier, greener grass that requires less
  watering, and mows safely over a box turtle or toad! Try not to mow in the evening when many nocturnal
  species leave their hiding places.
- Install small water features gentle gurgling sounds are irresistible to migrating and resident birds.
- Each year millions of toads, frogs, and other small creatures become trapped in window wells where they starve to death. Installing window well covers can reduce these needless deaths.

### 8. CREATE CATERPILLAR PUPATION SITES UNDER YOUR TREES

Caterpillars are pollinators, provide food for birds, and fertilize plants. More than 90% of the caterpillars that
develop on trees drop to the ground and pupate within the leaves and needles on the ground or chambers
they form underground. Replace lawn under trees with well-planted beds with groundcovers, leaf litter, rocks,
as well as plant wild ginger, wood poppies, native pachysandra, ferns, and mayapples.

### 9. DO NOT SPRAY OR FERTILIZE

• Insecticides, herbicides, and fertilizers are not necessary for a HOMEGROWN NATIONAL PARK. Creating soils rich in organic matter is entirely sufficient for healthy plants.

### 10. EDUCATE YOUR NEIGHBORHOOD CIVIC ASSOCIATION

 Many homeowners believe they cannot use native plants because of rules developed and enforced by their homeowner association. These rules are dated and created when we didn't know then what we do now.

The "new luxury landscape" is one of meadows and/or formal native planted gardens – it is no longer rolling green lawns.

# 9 Easy Steps for Eco-Friendly Lawn Care

https://lawnlove.com/blog/steps-eco-friendly-lawn-care/#:~:text=Go%20for%20a%20balanced%2C%20slow.water%20systems%2 0and%20increase%20biodiversity for complete article

### 1. OVERSEED THE LAWN EACH YEAR

- When your lawn develops patches and begins to thin, don't ignore the problem. A patchy lawn is vulnerable to weeds, which leads to more chemical herbicide use.
- Encourage dense, healthy growth with routine overseeding so your lawn can battle the weeds without
  chemical assistance. The best time to overseed a cool-season lawn (Kentucky bluegrass, perennial
  ryegrass, fine fescue, and tall fescue) is in the fall.
- Use grass types that fit your soil type and climate that need less water and fertilizers, and are resilient to local pests and lawn diseases.

### 2. MOW THE LAWN THE RIGHT WAY

- Sustain a healthy lawn by mowing it the right way. Mowing your lawn the
  wrong way will make it susceptible to pests and disease, which leads to
  harmful pesticides and fungicides.
- Don't mow too low: Cutting too low stresses the turf and makes it
  vulnerable to pests, weeds, and disease. Mow at the higher end of a
  grass' recommended cutting height to encourage a deeper root system,
  and shade out weeds.
- Follow the rule of thirds: Only cut one-third of the grass blade's length. For example, if the grass is 3 inches tall, don't cut more than 1 inch.
- **Keep your lawn mower blades sharp**: Dull mower blades rip the grass rather than cut.

# Low cut, allowing weeds to get sun and grow With the sun, the weeds can germinate and grow

### 3. FEED THE SOIL CORRECTLY

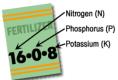
- Healthy soil, with good drainage, rich in nutrients and beneficial microorganisms, is the secret to lush, dense grass. Going green lawn care is the only way to achieve this long-term.
- Test your soil A soil test reveals a soil's fertility, structure, composition, and pH, which helps determine
  the most efficient way to care for grass. Different soil types retain different amounts of water you might
  be overwatering your lawn leading to water waste, and excess runoff.

### • Fertilize the eco-friendly way

- Fertilizer is a significant runoff pollutant. Rainfall and irrigation washes away unabsorbed fertilizer, and the runoff pollutes streams, rivers, and other bodies of water.
- o Go for a balanced, slow-release fertilizer to avoid leaching nitrogen into the water.
- Fertilize once a year. Healthy lawns typically don't need more than one treatment per year. The best time of year to fertilize <u>cool-season grasses</u> in the early fall.
- Use Organic fertilizer. Organic fertilizers improve soil structure, feed beneficial microorganisms, and decompose slowly, preventing leaching. Compost is an environmentally friendly fertilizer for your lawn.

Spread as topdressing once a year to keep healthy soil and grow thick, lush grass.

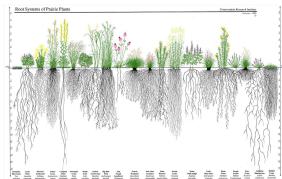
 Use Phosphorus-free fertilizer. If you must use synthetic fertilizer, use the type and amount based on your soil test results. Phosphorus (fertilizer's middle number) runoff into lakes causes algae blooms, and degrades conditions for aquatic plants and animals.



• Don't bag your leaves or grass clippings. Mow leaves to create a nutritional mulch for your grass. Cut the leaves down to dime-sized pieces. When you can see half an inch of grass above the shredded leaves, you've shredded them enough. Use shredded leaves and grass clippings as mulch in the vegetable garden or flower beds. Compost your leaves and grass clippings, which you can later use as mulch or organic fertilizer. Leave behind your grass clippings. They're healthy for your lawn and will decompose quickly.

### 4. REDUCE PESTICIDE AND FUNGICIDE USE

- Pesticides and fungicides also kill beneficial organisms that support a healthy lawn. Use them sparingly.
- <u>Aerate the soil:</u> Compact soil blocks water, oxygen, and nutrients from accessing the turf's roots. Relieve soil compaction with an aerator and boost turf health.
- <u>Dethatch the lawn:</u> Thatch is the layer of dead organic matter accumulating between the turf blades and soil surface. Too much thatch will attract pests and must be removed.
- Remove plant debris: Autumn leaves, spent annuals, and twigs make excellent pest real estate. Remove the debris from your yard to avoid an infestation.
- Encourage a deep root system To achieve a healthy lawn, you must help grass develop a deep root system using proper watering techniques. Here are two irrigation techniques that will quench your lawn's thirst the right way:
  - Water infrequently and for long periods: Watering too often and for short periods encourages a shallow root system.
     Watering less often for more extended periods encourages a robust root system.
  - Water in the early morning before 10 am: You'll lose water to evaporation after 10 a.m. Watering at night creates a long-lasting moist environment that invites pests and disease.



### 5. USE WATER-SAVING SYSTEMS

- Millions of people lack access to clean, safe drinking water. Saving water is critical, especially if you live in an area that has droughts, water supply shortages, or a dry climate.
- Save water with a rain barrel. Landscape irrigation accounts for <u>one-third</u>
   <u>of all residential water use</u> totaling ~9 billion gallons per day. Invest in a <u>rain</u>
   <u>barrel</u> to conserve irrigation water and minimize runoff.
- Save water with drip irrigation Watering from a hose or sprinkler is often lost through evaporation, wind, and runoff. Install a <u>drip irrigation system</u> in your flower beds and garden to conserve irrigation water. Soil readily absorbs the slow dripping water, which leads to less water loss.



### 6. REDUCE TURFGRASS-COVERED AREAS

- While beautiful and with its own benefits, turfgrass uses more water, nutrients, energy, and time than other landscaping options..
- **Downsize the lawn** Downsizing the lawn takes initial work, but you'll end up with fewer lawn chores and a gorgeous yard that's good for the environment.
  - Replace turf with <u>groundcovers</u> Ground covers means less mowing, and if you grow native groundcovers, it means less watering and chemicals.
  - o Install a xeriscape an eco-green landscape that thrives on little to no irrigation water.
  - Build a <u>rock garden</u> requires little maintenance, saves water, reduces chemicals, and a form of natural visual beauty.

- **Switch to a clover lawn** Clover is a low-maintenance, eco-friendly grass alternative. Clover requires less water than a grass lawn, less mowings, is drought-tolerant, remains green throughout the year, doesn't need fertilizer or herbicide, needs less aeration, attracts pollinators, and grows well in partial shade.
- **Grow native plants** What makes native plants such an eco-friendly addition to the lawn? Native plants: Thrive without fertilizers and pesticides, control erosion and stormwater runoff, restore natural habitats, increase biodiversity, and require less water than non-native plants

### 7. SWITCH TO GREEN TOOLS

Gas-powered tools produce carbon monoxide emissions that are harmful to the user and the
environment. Consider switching to corded and battery-powered tools to control emissions. Both
categories are reliable and easy to use on small and medium lawns.

### 8. INCREASE BIODIVERSITY

- Insects, birds, earthworms, bacteria, fungi, and other organisms are essential for healthy plants and a healthy planet. There are many ways to help - try using mulch and creating a small habitat garden.
- Use organic mulch Mulch has many benefits: It retains moisture in the soil, controls erosion, blocks weeds, and reduces erosion. Organic mulch, such as wood chips or shredded bark, is a plant-based material that adds organic matter and nutrients to the soil, enhances the soil's microbe community, builds biodiversity, reduces the need for fertilizer,





Increase biodiversity with habitat gardens Turfgrass is the most irrigated crop in the country. With the
help of native plants, you can boost your yard's biodiversity by building habitat gardens. These gardens
provide food and shelter for wildlife and restore balance to the ecosystem. Examples of habitat gardens
include: Meadow gardens, Butterfly gardens, Wildflower gardens, Water gardens, and Moon gardens

### 9. CHOOSE ORGANIC LAWN TREATMENTS

- Before buying the first synthetic chemical product on the shelf, consider an eco-friendly choice and go with an organic lawn treatment fertilizers, pesticides, fungicides, and herbicides instead.
- Why go Organic? Organic lawn treatments are eco-friendly alternatives to synthetic products.
  - Organic products quickly break down in the environment, making them less likely to be carried away by runoff. Inorganic products do not break down in the environment and often pollute runoff.
  - Most organic products are not toxic to humans or animals. If the product escapes into a water system, there is a lower chance of harming aquatic life. Caution: Organic does not always mean safe. Organic products are chemicals that occur in nature, whereas synthetic chemicals are artificial. Just because a chemical exists in nature does not automatically mean it's safe for humans and animals.
- **Eco-friendly fertilizers**: compost, aged manure, humic acid, worm castings, guano, bone meal, blood meal, fish meal
- **Eco-friendly pesticides**: diatomaceous earth, neem oil, peppermint, thyme, and rosemary essential oils, and biological options with beneficial nematodes
- Eco-friendly fungicides: citric acid, neem oil, clove oil, biological products including Bacillus amyloliquefaciens, Bacillus subtilis, and Trichoderma
- **Eco-friendly weed killers**: corn gluten meal, horticultural vinegar, clove oil; manual weeding and applying a thick layer of mulch are also very effective.

## **Information & Other Resources**

- 10 Things to Get You Started
   <a href="https://www.homegrownnationalpark.org/wp-content/uploads/2023/05/SHRINKTHELAWN.pdf">https://www.homegrownnationalpark.org/wp-content/uploads/2023/05/SHRINKTHELAWN.pdf</a>
- 9 Easy Steps for Eco-Friendly Lawn Care https://lawnlove.com/blog/steps-eco-friendly-lawn-care/#:~:text=Go%20for%20a%20balanced%2C%20slow, water%20systems%20and%20increase%20biodiversity
- Lawn to Lake Midwest Website <a href="https://lawntolakemidwest.org/">https://lawntolakemidwest.org/</a>