



Lawns and Ecosystem Health Resource Guide

Environment for Everyone

CAMPAIN

Looking to improve your lawn's environmental impact but don't know where to begin? We have compiled a list of resources to help you get started!

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Negative Environmental Impacts of Lawns

CCAC Rethinking Our Grass Lawns Flyer

- [Rethinking Our Grass Lawns](#)
 - **Source:** Campus Climate Action Corps Environment for Everyone Campaign
 - **Overview:** This flyer goes over the negative impacts that lawns have on environmental and human health and gives suggestions on how to improve.

History of Lawns

- [The American Obsession with Lawns](#)
 - **Source:** Scientific American Blog by Krystal D'Costa
 - **Overview:** This article is a part of the Green Thumbery series, where everyday gardening meets history and science. It goes over the history of lawns in America, what they symbolize, and why we should care.

Lawn Space and Ecological Impact

- [A strategy for Mapping and Modeling the Ecological Effects of US Lawns.](#)
 - **Source:** Study done in collaboration with: NASA Ames Research Center, NOAA/National Geophysical Data Center, Cooperative Institute for Research on the Atmosphere, University of Colorado, Cooperative Institute for Research in the Environmental Sciences, and the Numerical Terradynamic Simulation Group, College of Forestry and Conservation, University of Montana Missoula.
 - **Overview:** Determining the amount of space dedicated to lawns in the US and their ecological impact

Emissions from lawn and garden equipment

- [National emissions from lawn and garden equipment](#)
 - **Source:** EPA Report
 - **Overview:** How many greenhouse gas emissions are emitted by lawn and garden equipment in 2011

Lawns and Climate Change

- [Lawn Maintenance and Climate Change](#)
 - **Source:** Princeton Student Climate Initiative
 - **Overview:** How lawns contribute to climate change and solutions to improve their climate impact

Lawn Care Strategies and their impact

- [Comparative evaluation of aesthetic, biological, and economic effectiveness of different lawn management programs](#)
 - **Source:** Collaboration between Department of Entomology, Ohio State University, Department of Entomology, Purdue University, and Department of Horticulture and Crop Science, Ohio State University.
 - **Overview:** Study done on the cost-effectiveness, impact, and quality of various lawn care strategies

Improve Existing Lawns

CCAC How to Transform Your Lawn Brochure

- [How to Transform Your Lawn Brochure](#)
 - **Source:** Campus Climate Action Corps Environment for Everyone Campaign
 - **Overview:** This brochure details why lawn improvements are necessary and steps to take to start your lawn transformation process

Water more efficiently

- [The Environmental Protection Agency \(EPA\) WaterSense](#)
 - **Source:** EPA
 - **Overview:** provides facts on overwatering and tips on how to more water appropriately during the summer

Environmentally friendly practices

- [Lawn and Garden](#) page
 - **Source:** EPA
 - **Overview:** How to implement lawn care practices that are better for the environment.

Greenscaping and creating a “natural” lawn

- [Healthy Lawn, Healthy Environment: Caring for your Lawn in an Environmentally Friendly Way](#)
 - **Source:** EPA
 - **Overview:** How to create a healthier grass yard that promotes environmental wellbeing

Lawn alternatives

Native Plants and Ecological Networks

- [Homegrown National Park](#)
 - **Overview:** [Getting Started](#) on regenerating biodiversity and ecosystem function by planting native plants and creating new ecological networks.
 - Goals: Our initial goal is 20 million acres of native plantings in the U.S. This represents approximately ½ of the green lawns of privately owned properties.

DIY Garden

- Approximate Cost Analysis to Start a DIY Garden
 - Costs/prices are from [Home Depot](#) and [Lowe's](#)
 - Small starter garden- in ground (5 plants, 5 seeds) = \$155 to \$200
 - Includes required tools (hose, shovel, gloves, etc), plants, soil
 - Does NOT include the cost of digging up the grass
 - For a raised bed garden - this option is best if you have had a lawn for a long time as the soil may be highly deprived of nutrients
 - Pre-built - \$70 - \$150
 - DIY raised bed = (approx) \$60
 - Includes wood panels, brackets, screws, and screwdrivers
 - For a raised bed with 5 plants and 5 seeds = (approx) \$260ish
- Tips for spending less \$\$
 - Use these tips to “[Start a garden practically free!](#)”
 - Rent tools from local hardware stores!
 - EX: [Home Depot Tool and Truck Rental](#)
 - Thrift tools and structural items
 - Use your local “Buy Nothing” Facebook group to seek out free tools/resources

Coastline Gardens

- [SurfRider](#)
 - **Overview:** How to create ocean-friendly, inexpensive gardens for those who live near coastlines

Climate Victory Gardens

- [Climate Victory Gardens](#)
 - **Overview:** Drawing inspiration from the victory gardens of the world wars, these gardens are instead centered around restoring soil, so it can sequester more carbon

Monarch Waystations

- [Monarch Waystations](#)
 - **Source:** Monarchwatch.org
 - **Overview:** Provide habitats to support and sustain Monarch butterfly populations

Tree Planting

- [Arbor Day Foundation](#)
 - **Source:** Arborday.org
 - **Overview:** “Give a Gift, Green the Earth” will send you 10 tree saplings for donating
 - [Find the best trees](#) for your planting needs

Reconstruct and Rethinking Lawn Structure

- [Shades of Green Permaculture](#)
 - **Source:** Shadesofgreenpermaculture.com
 - **Overview:** Example of a company doing work to transform conventional landscapes into beneficial ecosystems
- [Low-Maintenance Lawn Alternatives](#)
 - **Source:** Fingergardening.com
 - **Overview:** When you’ve grown beyond your grass, replace your unused lawn with massed ground covers or a mix of low growers

Community Gardens: Get Involved (or start one!)

American Community Garden Association

- [Find a Garden - Share a Garden](#)
 - **Source:** Communitygarden.org

- **Overview:** An interactive map to help find community gardens throughout the world

Food Revolution Network

- [Community Gardens Are Growing Health, Food, & Opportunity](#)
 - **Source:** Foodrevolution.org
 - **Overview:** Information regarding the benefits of community gardens, organizations that are helping establish community gardens, and how to start one yourself!

University of Georgia Extension

- [How to Start a Community Garden](#)
 - **Source:** University of Georgia Extension
 - **Overview:** Four steps to starting a community garden with suggestions and guidance on how to be successful.

American Horticulture Society

- [Master Gardeners](#)
 - **Source:** AHSgardening.org
 - **Overview:** Master Gardeners are people who are extensively trained in horticulture and gardening. This website compiled localized resources and contacts who could be a valuable asset to building your own garden!

How to find native plants in your area

National Wildlife Federation

- [Native Plant Finder](#)
 - **Overview:** Type in your zip code and discover native plants, ranked by the number of butterfly and moth species that use them as host plants for their caterpillars.
- [Native Host Plants by Ecoregion](#)
 - **Overview:** Host plants for butterfly and moth caterpillars based on your region.

Audubon

- [Bird-Friendly Native Plants](#)

- **Overview:** Find the best plants for cultivating bird-friendly habitats in your area and where to get them.
- [New England Native Plants](#)
 - **Source:** Mass Audobon
 - **Overview:** Find a variety of plants that are native to New England that will promote wildlife and pollination.

Research local botanic gardens and nature preserves

- Call, visit the webpage, or visit in person to discover what native species they have
 - For example: [Heritage Museums & Gardens](#) in Cape Cod, MA

Online Shopping for Native Plants

- [Direct Native Plants](#)
 - **Overview:** Online shopping for native plants
- [Prairie Nursery](#)
 - **Overview:** A resource for learning more and purchasing native plants
 - Be sure to [research your hardiness zone](#) and soil types before purchasing!

Learn about invasive species in your area

Better Homes & Gardens

- [10 Invasive Plants Per US Region](#)
- **Overview:** Learn how to identify some invasive species in your area

Contact your local botanic garden or university extension

- **Overview:** Learn more about specific invasive species in your area by contacting the local experts
- Use [this Wikipedia list](#) to start your state-wide botanic garden search

iNaturalist App

- [iNaturalist App](#)
 - **Overview:** Take a picture of a plant and it will tell you what plant it most likely is, so you can identify invasive plants with ease

More Sustainable Lawn-Care Practices

Electric Lawn-Care Appliances

- [Lawn Maintenance and Climate Change](#).
 - **Source:** Princeton Student Climate Initiative
 - **Overview:** Has a section on electric mowers and their environmental benefits, and provides links to a few that are currently on the market

Fertilizer Alternatives

- Worm castings or vermicomposting – [“How to Add Worm Castings to Your Garden and Lawn”](#)
 - **Source:** Uncle Jim’s Worm Farm
 - **Overview:** The benefits and implementation of vermicomposting with a link to how to make “worm tea” as a liquid alternative
- Compost – [Homes & Gardens](#)
 - **Source:** Homesandgardens.com
 - **Overview:** Discusses the benefits of applying compost to a lawn, how to do it properly, and important considerations.
- [Homemade Fertilizer for Plants: 10 Best Natural Recipes](#)
 - **Source:** Lomi.com
 - **Overview:** Use things like leftover banana peels to help your plants thrive; reduce waste and spend less money on plant care!

Pesticide Alternatives

- [“Healthy Lawn, Healthy Environment: Caring for your Lawn in an Environmentally Friendly Way”](#)
 - **Source:** EPA
 - **Overview:** Discusses how to implement integrated pest management (IPM) to combat pests and highlights steps one can take to create a preventative healthcare program for your lawn, which will prevent problems from arising in the first place
- [Homemade Natural Alternatives](#)
 - **Source:** PeaceCorps
 - **Overview:** Tips and recipes for making natural pest controls!

How to help even if you don't have a lawn

Educate and Advocate

- Speak to HOAs about contracting ecologically-ethical landscapers
 - Quote from [Nature's Best Hope](#):
 - "Our task... is to rewrite HOA guidelines. We must join our HOA committees and educate the other members about the many ecological roles our landscapes must now play, how every landscape must be designed to support diverse food webs that contain both herbivores and their natural enemies, and how our yards must support both generalist and specialist pollinators as well as manage our watersheds and store as much carbon as possible in their plants and soils" pg200
 - Design artful landscapes: use a small strip of manicured lawn to demonstrate to the HOA that the plants are purposeful/intentional
- Talk to your friends, families, neighbors, etc. and discuss why lawns are bad for them. Highlight what they value - family, pets, human health, natural health - and how it can be damaged by lawns, then point them to beneficial resources (like this one!) to help them find a place to start!

Lead by Example

- If you have a lawnless yard, you are already leading by example
- Promote and volunteer for local grassroots organizations that are promoting biodiversity, pollinator/native species/edible gardens

Donate

- Lots of organizations are doing great work in promoting and implementing lawn alternatives; find some near you and consider donating!
 - Donate Time
 - Donate Money
 - Donate Resources

Volunteer

- Gain hands on experience educating and inspiring others about the importance of native plants and the impacts of our current lawn standards
- Volunteer at: Nature preserves, Botanic Gardens, Community Gardens, Neighbors/Friends lawn transitions or gardens, Education Events