

## What is the GPMGA?

The Goochland-Powhatan Master Gardeners Association is made up of volunteer educators in the community who have received specialized training in environmental horticulture through Virginia Cooperative Extension.

Master Gardeners truly enjoy sharing science and research-based gardening information with the public.

The GPMGA mission is to bring people together to discover and share knowledge about gardening in Central Virginia.

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# Home Gardener Checklist

## Opportunities to Help Our Planet in Your Own Back Yard



Helping Our Planet Endure

Goochland-Powhatan  
Master Gardener Association

# Welcome to HOPE from the Garden

The Hippocratic oath says, “First, do no harm.” As home gardeners we can implement research-based gardening practices to avoid doing harm to our planet. Home landscapes represent a huge portion of our planet’s surface (40 million acres in the lower 48 state alone!). When home gardeners implement planet-positive gardening practices it makes a difference.

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*By taking simple actions as we garden,  
we can all Help Our Planet Endure.*

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This brochure highlights five practical gardening principles that you can implement to make a positive impact on our planet. By following these guidelines in your own garden, you can contribute to:

- keeping our **land** healthy and supporting the life that depends upon it.
- keeping our **waters** clean and plentiful.
- minimizing gardening activities that contribute to **air** pollution and greenhouse gases.

By adopting these simple measures as we garden, we can all Help Our Planet Endure.

## Contribute to Clean Air

- ❑ **Reduce your carbon footprint.** According to the EPA, gasoline powered lawn and garden equipment in the US emit 20.4 million tons of carbon dioxide per year. Reduce your lawn to reduce your mowing.
- ❑ **Don’t use peat moss products.** Peat bogs store a vast amount of carbon. When the bogs are mined large amounts of carbon dioxide are released. Coir-based products, compost, pine needles and leaf mold are some more sustainable substitutes.
- ❑ **Plant a tree (or several).** A tree can absorb up to 50 pounds of carbon dioxide per year. That means a 40-year-old tree could sequester up to 1 ton of carbon dioxide.
  - Plant “the right tree in the right place” with native trees that increase biodiversity.
- ❑ **Grow and eat more plant-based proteins.** 14% of all human induced climate emissions are from livestock.



## Provide Habitat for Wildlife

- ❑ **Do less to help wildlife more.** Decrease fall garden cleanup and leave some areas wild for the winter. Leaving stems up over winter can provide seed heads for birds and shelter for beneficial insects.
- ❑ **Retain natural cover.** Creating a brush pile in an out of the way spot creates nesting habitat and shelter. Leaving leaf litter in a garden bed protects worms, toads, and overwintering butterfly, insect and moth larvae.
- ❑ **Let some snags and den trees remain in the landscape.** Cavities in dying trees are important for nesting, resting, and food for insect eaters like woodpeckers.
- ❑ **Provide supplemental water sources.** Most living things needs water for survival. Add birdbaths, ponds, and other features to your landscape.



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## Build Healthy Soil

- ❑ **Disturb soil as little as possible.** Use no-till and low-till methods.
  - Untilled soil is a significant carbon sink.
  - Tilling reduces soil fertility as it introduces excess oxygen which depletes nutrients.
- ❑ **Recycle organic material as “green mulch” to feed your soil.** Leave chopped up leaves in your planting beds and grass clippings on your lawn.
- ❑ **Only use organic amendments.** Avoid synthetic fertilizers. Synthetic fertilizers can contribute to the die-off of beneficial soil organisms and excess nitrogen can contribute to greenhouse gases and water pollution.
- ❑ **Avoid using pesticides.** Pesticides can harm human health, pet health, and pollinator health -- and kill beneficial soil organisms.



## Reduce Lawn Area

- ❑ **Smaller lawns mean less air pollution.** Power lawn tools account for 5% of total US air pollution.
- ❑ **Smaller lawns mean less harmful lawn chemicals.** Lawn chemicals have been tied to both higher pet and higher human cancer risk.
- ❑ **Smaller lawns mean less water consumption.** According to the EPA, landscape irrigation is estimated to total nearly 9 billion gallons per day in the US – nearly one-third of all residential water use.
- ❑ **Turf grasses are not native plants and do not support biodiversity.** Pollinators and other beneficial insects cannot use turf grasses as a host plant. Turf areas are ecological ‘dead zones.’
- ❑ **Replace lawn areas with lower maintenance native plants.** Native trees, shrubs, and perennials are adapted to your area and don’t have to be mowed!



[gpmga.org](http://gpmga.org)

## Plant Native Plants

- ❑ **Pollinators and other wildlife need native plants to survive.** Native insects and wildlife have co-evolved with native plants over thousands of years, and those are the only plants on which they can feed and raise their young.
- ❑ **Learn which plants are native in your area.** Visit [plantvirginiannatives.org](http://plantvirginiannatives.org).
- ❑ **Target planting 70% or more of your landscape with natives.** Songbirds feed their young insects that rely on native plants. Studies show that songbirds can only successfully raise young in landscapes with native plant density.
- ❑ **Identify and replace non-native invasive plants in your landscape.** Visit [dcr.virginia.gov](http://dcr.virginia.gov) and enter ‘Invasive Species Plant List’ in the site search bar.

