

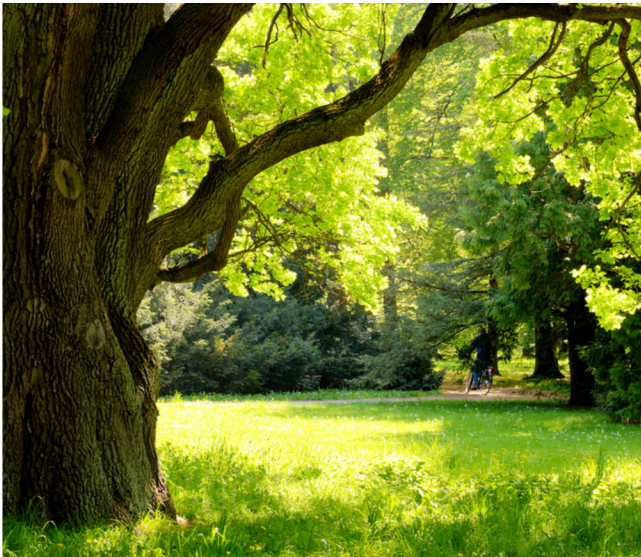
MONARCH DEFENDERS NEWSLETTER

SEVENTH ISSUE



BACKYARD CONSERVATION:

ENVIRONMENTAL ACTIONS FOR A WORLD IN CRISIS



This issue of Backyard Conservation is about radical rewilding: restoring degraded land such as urban vacant lots, neglected park edges, and roadsides. It is an easy way to improve invasive-dominated areas if you are not part of a larger organization and don't have much land yourself. From planting trees and starting a wildflower meadow to seed bombing and removing harmful invasive plants, the following pages will teach you how to get started!



Seed bombs

Seed bombs are an easy way to get started with radical rewilding. They are native seed-filled balls made from a mixture of clay and compost that you can plant anywhere at low cost, from roadsides and vacant lots to park edges and bare places in your backyard. Here are instructions for how to make your own:

- Mix together 5 cups of compost with 1 cup of wildflower seeds native to your area and 2-3 cups of clay powder in a bowl.
- Slowly mix in water until the ingredients stick together.
- Roll the mixture into balls.
- Let the balls dry in the sun.

Seed bombs can be especially fun for kids, who can throw them anywhere they want!



Trees, trees, and more trees

Another great radical rewilding activity is planting native trees. Trees provide important food sources and habitat for wildlife as well as being important helpers in the fight against climate change.

Increasing urban tree canopy can also keep neighborhoods cool. Growing trees at home is especially fun. If you walk in the woods in fall or winter, you will certainly find nuts of many beneficial tree species, which you can grow in pots on your windowsill. You can also transplant seedlings from areas where they would otherwise be mowed and move them to safer locations.

The following species are some of the most ecologically beneficial trees native to the mid-Atlantic:

Oaks (*Quercus*): Northern red oak (*Q. rubra*), White oak (*Q. alba*), Pin oak (*Q. palustris*), Scarlet oak (*Q. coccinea*), and others.

Oaks are the top plant genus for wildlife, supporting 557 species of caterpillars, which are a crucial avian food source.

Maples (*Acer*): Silver maple (*A. saccharinum*), Red maple (*A. rubrum*), Sugar maple (*A. saccharum*), Box elder (*A. negundo*).

Birches (*Betula*): river birch (*B. nigra*), paper birch (*B. papyrifera*), sweet birch (*B. lenta*), yellow birch (*B. alleghaniensis*).

Other important native trees include black cherries (*Prunus serotina*), American beeches (*Fagus grandifolia*), persimmons (*Diospyros virginiana*), tulip poplars (*Liriodendron tulipifera*), American sycamores (*Platanus occidentalis*), and white pines (*Pinus strobus*).

Common invasive plants

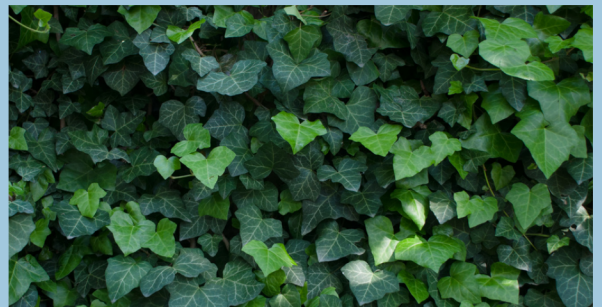
These are a few of the most notorious invasive plants in the mid-Atlantic region. Remove these wherever you find them! They outcompete native plants and can destroy habitats.



Porcelain Berry (*Ampelopsis brevipedunculata*):

Grows in forest edges in large thickets. Has small blue or purple berries.

English ivy (*Hedera helix*): Often climbs and strangles trees in degraded forests. Has pointed leaves with very visible vein lines.



Amur honeysuckle (*Lonicera maackii*): Large shrub with white flowers that produces copious amounts of red berries.

Lesser celandine (*Ficaria verna*): Highly aggressive spring ephemeral bearing yellow flowers; forms dense mats on forest floors.



Japanese stiltgrass (*Microstegium vimineum*): Narrow-leaved grass that can dominate forest floors and meadows.

Removing invasives

Vines

Invasive vines (such as English ivy, Japanese honeysuckle, porcelain berry, or oriental bittersweet) often suffocate native trees, and can contribute to the degradation of urban and suburban woods. Luckily, these vines are fairly easy to stop from strangling trees. Cutting the woody stem at the base of the tree with a handsaw or a pair of clippers (depending on the size) is an effective way to make sure the tree isn't harmed by the vine. However, to fully eradicate the vine, you must dig out its roots.

Grasses & wildflowers

One of the best options for eradicating invasive grasses and wildflowers is to simply dig them up. Many species (like Japanese stiltgrass and lesser celandine) form dense mats that hug the ground, which can be shoveled out. But beware of rhizomes – underground stems that send out roots and shoots – which are very difficult to eradicate. Weeding any sprouts from areas you are restoring is key.

Shrubs

While full-grown invasive shrubs (such as Amur honeysuckle, Japanese knotweed, and multiflora rose) can be very hard to dig up, cutting the woody stem with a handsaw is an easier way of taking them out. Of course, this does not fully eradicate the plant, so with shrubs that have not grown to their full height, it is much better to dig their roots.

Starting a wildflower meadow

If you have a wider area you would like to restore, you can create a native meadow for pollinators and birds. After you remove the existing invasive vegetation, you can begin planting. This is something that can be done in as little space as 7 by 4 feet, or can be something much larger that may take several years to establish.

One important thing to note is that lots of native meadow plants require cold-stratification, which means they need a period of exposure to cold temperatures. This can be done naturally by sowing the seeds in the autumn and letting them stratify during the winter. However, cold-stratification may be done artificially by putting the seeds in the refrigerator for their required amount of time. And some natives (like asters, coneflowers, and most grasses) don't need to be stratified at all, and can be planted directly into the ground in spring. For recommendations on the best native pollinator plants, go to the informative guides on the Monarch Defenders website.

Wait for around a month of warm temperatures in the spring after sowing the seeds. Hopefully, many will come up. If there are any gaps in your meadow, you can supplement with wildflower plugs or full-grown plants.

