



## Planting Guidelines for New Plantings

### **Site Selection and Assessment**

Decide how and where you want to use native plants, whether for new border gardens, massing among shrubs in existing foundation beds, for rain gardens, pollinator or other wildlife habitats, or replacing portions of lawn with small meadows. Assess the space where you will be planting to determine the quality of sunlight, moisture, and soil. If there are existing plants, survey existing vegetation to determine what does and does not thrive. It is important to identify existing weeds and invasive plants before planting to determine the best way to manage and control each species.

If invasive plants exist in your proposed planting site, always control invasive species first. [Plant Invaders of the Mid Atlantic](#) is a good resource for control methods on a plant type basis. Allow time prior to planting your new garden to address invasive species management. You may need to work on the area for a number of months or even years to successfully eradicate invasive species. New native plant gardens should generally not be planned in areas with active invasives infestations. [The Anne Arundel County Weed Resistance](#) (aka weed warriors) website contains good information on invasive plant control. For possible assistance in removal of invasives in a public project area, contact the volunteer coordinator: [annearundelwr@gmail.com](mailto:annearundelwr@gmail.com).

### **Consideration of weeds**

Successful establishment of new native plants requires that the new plants (especially plugs) do not get outcompeted by existing weeds and their seed banks. We suggest keeping any soil tilling to a minimum since doing so results in the germination of previously dormant weed seeds. However, if choosing a site overrun by weeds, plan appropriate site preparation weeks – if not months – before planting, especially when using organic methods for killing existing vegetation.

The methods of turf removal listed below by smothering the weeds also may be used to kill the weeds.

### **Preparing the area for planting**

If planting site is turf, there are several recommended methods to prepare the site. This could be done 4-6 months prior to the intended planting date in order to kill existing perennials and even woody plants.

You can always remove turf and other existing vegetation, including roots, then use the wood chip or mulch methods below to cover the bare dirt.

Physical methods of turf removal are preferable to using herbicides since the intention of planting native plants is to protect water quality and the environment.

### **Methods of turf removal:**

1) Sheet mulching method: Start by cutting grass as low as possible to the ground. Apply at least 4 sheets of newspaper or a single layer of cardboard, overlapping to smother any regrowth. If newspaper is used, avoid using the shiny or colored pages. Water the newspaper well to keep it from blowing if there is a breeze. Then apply 4-6 inches of wood chips to the entire garden bed on top of the newspaper or cardboard. Ideally, wait 2-4 months for grass to die under the sheet mulch before planting. Clean invasive free wood chips can be obtained directly from local tree companies, or from the [Chip Drop App](#).

When ready to install new native plants, remove a small area of the sheet mulch near the planting, and install potted plants or plugs by cutting holes in the newspaper or cardboard. It would also be ok to remove any turf found under the sheet mulch near the planting hole. It is very important that new plant roots make contact with soil under the sheet mulch layer, and that they are not planted in wood chips alone. That may mean that a deeper hole is needed for planting. It is possible to plant larger perennials and woody plants immediately into an area which has been sheet mulched with new/green wood chips as long as wood chips are pulled a few inches away from new plants.

2) Solarizing Method: Using stapled down sheets of black or clear plastic or a tarp over the grass. Over time, heat from the sun will kill the grass. Remove the plastic before planting. As with sheet mulching, be sure to start the process at least two months in advance of installing the new native plant landscape to allow time for the grass to die off.

3) Mechanical turf removal methods - Using a sod cutter to remove turf or using shovels to cut out grass roots by hand. Flat shovel working in strips works well. This method is needed if grass is not killed in advance.

### **Compacted soil concerns:**

It will be hard for new plants to establish roots if the soil is compacted and not loose. If the site is heavily compacted, loosen the soil first prior to planting. If the site is heavily compacted, deep-till the bed to a depth of approximately 8 to 12 inches, using a rotary tiller (or for small areas, by hand using shovels and forks). If needed, add 2 inches of a suitable compost mix evenly across the landscape bed while tilling.

### **Soil amendments:**

Assess existing soil conditions in the planting bed. Add in organic material into native soil if desired. Compost is recommended but not required. [Leafgo](#) is an inexpensive and very good soil amendment, and can be purchased at most garden centers and home improvement stores, such as Home Depot, for around \$5.00 per bag. Bagged Leafgro or other bulk or created compost can be used and is recommended for sandy or drier sites. If using amendments, mix the amendments into the removed native soil and use for backfill. A good rule of thumb is to keep a ratio of 70% native soil and 30% part amendments to avoid making the soil too nutrient rich, which can cause native plants to flop.

### **Site planning:**

Determine spacing and groupings of plants. Use a grid to help. Planting perennials at 1 ft spacing will reduce weeds. Call Miss Utility <https://www.missutility.net/homeowner/> to mark out the planting area to make it safe for planting. Avoid planting in utility rights of way.

### **Planting:**

Planting potted plants: Dig a hole suitable for your chosen plant. Generally this is twice the width but only as deep as the soil in the plant's container. With a potted plant, you can check this by placing the pot in the hole. Loosen the soil and gently massage the roots of any plant that comes out of a container. Vertical cuts may be made around the root ball to loosen roots. Flare out any roots growing in a circle. Backfill soil between the plant and the edge of the hole ensuring that there are no air pockets. Pushing soil around the roots in a vertical manner can help to make sure that roots are covered with soil.

Plant plugs to a depth that allows the plant's crown to lie at soil level. Backfill soil between the plug and the hole. Press the soil firmly around each plant to ensure root contact. Water in well to evenly moisten the soil.

Seasonal consideration for planting plugs – it is best to plant plugs in Spring. Plugs may heave out of the frozen ground in Winter during freeze/thaw cycles. If plugs are planted in Fall, it is

recommended that they are mulched with 3 inches of mulch. The plug plantings should be checked in Spring for heave, and potentially replanted.

It is optional to add compost such as Leafgro or slow release fertilizer such as Osmocote or Biotone to the planting hole to help get the plant roots established.

### **Mulching**

Mulch helps conserve soil moisture and reduces weed pressure. We recommend using it immediately after planting and watering with 2-3" of mulch. Preferred mulches include weed-free wheat straw, dried grass clippings, cocoa bean hulls, or dried shredded leaves. Hardwood or pine bark mulches can also be used. Mulch should not be allowed to touch the stems or trunk of new plantings. Pull mulch a couple of inches away from stems or trunks of all plant creating a flat "doughnut".

For new trees and shrubs, remove at least 3 ft ring of turf and mulch the entire 3 ft diameter. Wider is better. Check mulch thickness periodically. Add mulch only if necessary to maintain a depth of no more than 4 inches.

<https://extension.umd.edu/resource/mulching-trees-and-shrubs>

Too much or improper mulching can cause health problems for plants and trees.

In rain garden maintenance, you may need to remove old mulch every year or two to maintain the appropriate depth for your rain garden to function properly. Old mulch should be removed about every 2 years and refreshed with new mulch with the goal of 2-3 inches of mulch at all times.

### **Watering**

Water in plants immediately after installation to fill soil air holes around root systems. During the first three weeks, water plantings for about 60 minutes every four days on mild spring days or every three days on hot summer days. A one-hour watering will soak more deeply than 15-minute ones. After the first year, you should only need to water during noticeable drought conditions.

### **Proactive Weed Prevention and Maintenance Tips**

Vigilant and frequent weed control the first year will ensure effective establishment over the long term.

A simple or edged border and educational signage installed will help to identify the planting so it is recognized as a planting area and not inadvertently destroyed.

Ideally, maintenance crews should be engaged early in the planning process to ensure they are capable of maintaining new plantings. After planting, share the planting plan with the maintenance crew and help them identify plants prior to doing maintenance. Help maintenance crews to understand the perennial planting bloom sequence so as not to disturb or remove perennials which have finished blooming. Many perennials are slow to emerge in the Spring and may not be noticeable until early June. Plant id tags or labels are very helpful to locate and identify plants.

Allow perennial plant stalks to stand/remain intact after bloom in the Fall and refrain from pruning until Spring, then prune to 6 inches. Birds and insects will feed on the seeds and pollinators will use the dead stems as cover during winter. If a more manicured look is required, prune as necessary, leave at least 6 inch stems for next year's nesting of solitary native bees.

Expect perennials to need to be thinned or divided within 3 years. Divide and share extra native plants.