



Rain Garden Trivia



Rain gardens breed mosquitos– FALSE

Mosquitos need 7-12 days of standing water to lay and hatch their eggs; rain gardens usually have *standing water* for only a few hours after storms, if at all.

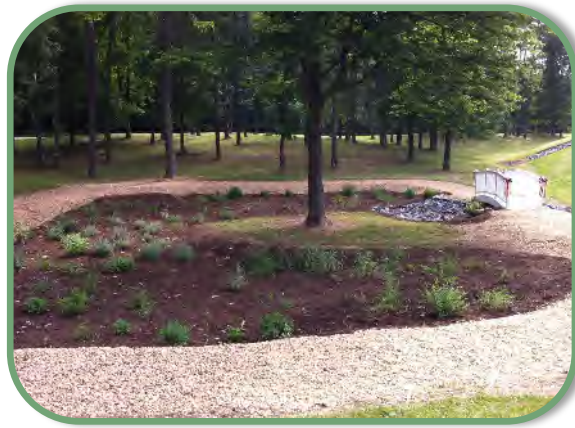
Rain gardens are *time* and *resource* intensive– FALSE

Rain gardens can be as time or resource intensive as the owner wants it to be. Generally more maintenance is needed the first two years until the garden is well established. After that it just needs routine weeding. To keep things cost efficient, see if family and friends can help install the garden. Additionally, by utilizing native shrubs and flowers you give your rain garden the best chance of survival and therefore avoid having to replant the garden. Native plans are adept at growing in the localized area, which means their survival rates are often higher than non-native ones.

Further native plants have the added benefit of better supporting the local ecosystem since native animals and insects prefer native plants over nonnative ones. If you wish to spend the resources, certified rain garden landscapers can design and build your rain garden to suit your soil type, land area, and personal preferences.

Rain gardens will lower property value– FALSE

Though beauty is in the eye of the beholder, there is evidence to suggest rain gardens increase property values. In a study by Ward, MacMullan, and Reich, their findings suggest a 3.5-5% property value increase for houses that have rain gardens in the vicinity (2008).



Above: The rain garden at Interstate 81's welcome center



Above: A rain garden in Martinsburg, WV

Resources to Build Your Own Rain Garden

The WV Department of Environmental Protection provides an easy to understand rain garden guide featuring native plants for the mid-Atlantic area which can be incorporated into your own rain garden

<https://dep.wv.gov/WWE/Programs/nonptsources/Documents/RainGardenbrochure.pdf>

Wisconsin's Department of Natural Resources has a comprehensive 32 page rain garden how-to manual

<https://dnr.wi.gov/topic/shorelandzoning/documents/rgmanual.pdf>

West Virginia Department of Environmental Protection
601 57th Street SE
Charleston, WV 25304
www.dep.wv.gov



A Visitor's Guide to The West Virginia Department of Environmental Protection's Rain Garden

In 2008, the West Virginia Department of Environmental Protection (DEP) installed a rain garden in the northwest corner of the parking lot (pictured right). When it rains, stormwater flows off the 1.5 acre impervious lot and into the 1,620 ft² rain garden. The stormwater can then soak into the ground to recharge groundwater aquifers or be absorbed by native shrubs and perennial plants. These plants also help filter and remove pollution that is carried by the stormwater. Any overflow of water is diverted to a storm drain which flows directly into the Kanawha River.



DEP Rain Garden, 2008



True or False: Rain gardens breed mosquitos.



DEP Rain Garden, 2019

Rain gardens do much more than an average ornamental garden or turf grass lawn. Some benefits rain gardens provide include:

- ◇ Protecting waterways through absorbing and filtering pollutants carried by stormwater
- ◇ Recharging wells and aquifers by slowing down and temporarily retaining stormwater, thus giving the water an opportunity to soak into the ground
- ◇ Helping protect communities from flooding and drainage problems by slowing down and temporarily retaining stormwater
- ◇ Enhancing the beauty of yards and neighborhoods
- ◇ Providing habitat for birds, butterflies, and beneficial insects



True or False: Rain gardens are always time and resource intensive.

Native Shrubs

These woody plants are smaller than trees and have several main stems near the ground. Given their woody nature, they tend to not relocate in the garden, which is why they can be mapped.

Arrowwood, *Viburnum dentatum*
Deciduous shrub growing 6-12ft tall, has white flowers that bloom in May and blue berries. In autumn the plant turns crimson.



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Black Haw, *Viburnum prunifolium*
Reaching 6-12ft tall, this deciduous shrub has white flowers that bloom in May. In autumn the plant turns a reddish color.



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Bursting Heart, *Euonymus americanus*
Also known as 'strawberry bush', this shrub grows 4-6ft tall. It has greenish stems and showy red fruit from which it gets its name. Turns crimson in autumn.



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Eastern Wahoo, *Euonymus atropurpureus*
This 10-15ft shrub has small purple flowers and scarlet fruit. Leaves turn a dull or greenish red in the fall.



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Elderberry, *Sambucus canadensis*
Growing up to 12ft tall, in June this shrub has tiny lemon-scented flowers that grow in large clusters called 'cymes'. These turn into the black fruits used to make elderberry products.



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Gray Dogwood, *Cornus racemosa*
Reaching 10-15ft tall, the stems' ends are red and feature white flowers. These white flowers give way to white berries.



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Spice Bush, *Lindera benzoin*
Known best for its aromatic leaves, this 6-12ft shrub has yellow flowers in April and red berries with yellow foliage in the fall.



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Winterberry, *Ilex verticillate*
A 3-12ft shrub gets its common name from the red berries that last through the winter. It has 2-3in long dark green leaves that are toothed, and greenish-white flowers which appear in late spring.



CC BY-NC 2.0 Jaybirding

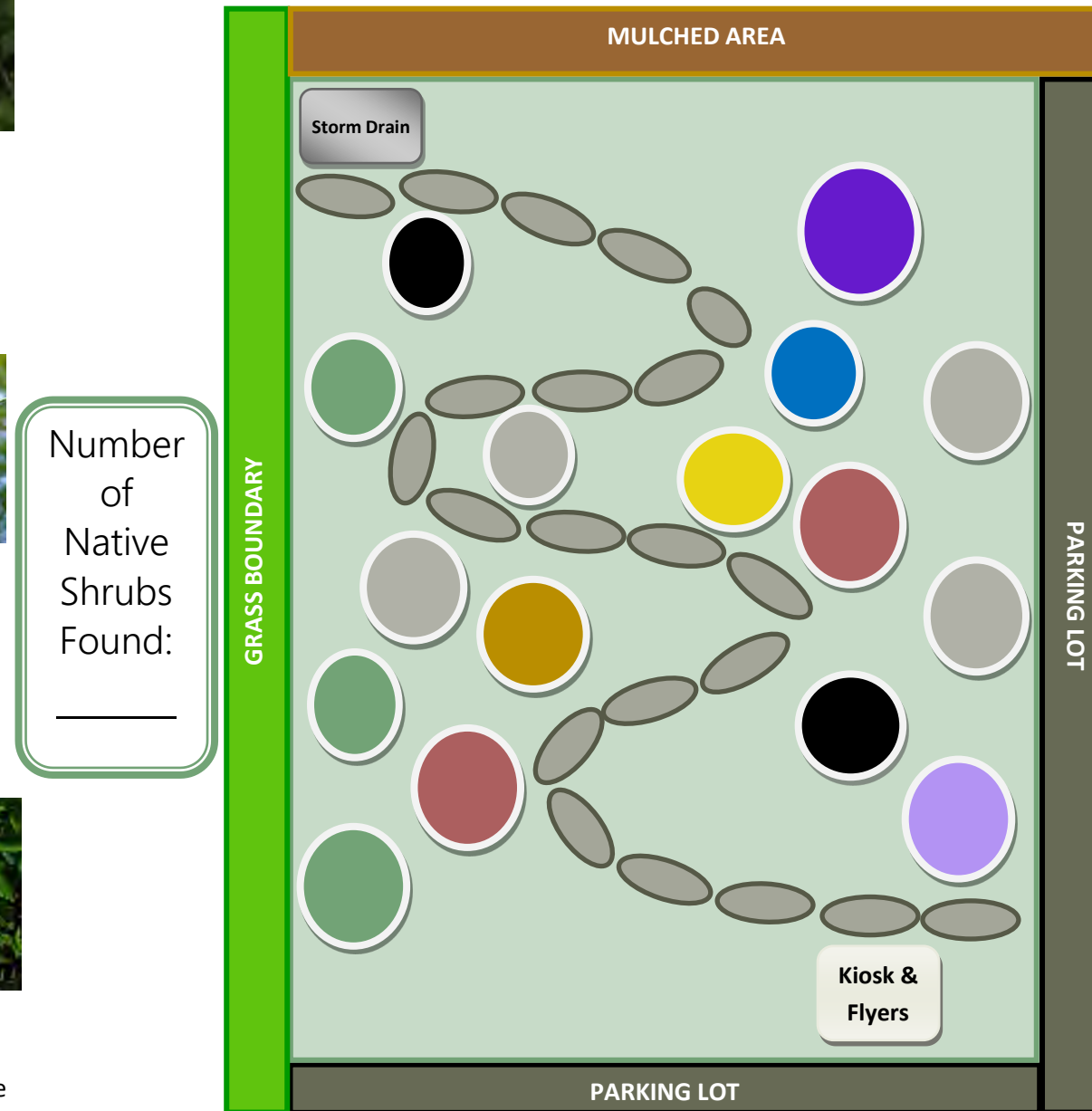
Witch Hazel, *Hamamelis virginiana*
This species of Witch Hazel (there are 100+) has yellow flowers/foliage in the fall. Its fruit begin as green capsules that become woody with age. In the fall the capsules explode, shooting the seeds up to 30ft from the parent tree.



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Explore the DEP Rain Garden!

Using the below map, take a walk along the garden path. The circles are color-coded to represent different native shrubs planted within the garden. The common name is listed first, followed by the scientific name in italics. How many can you find? Can you find any of the native perennials listed on the right hand side of this brochure (they are not mapped)? Fill in the blanks below with your answers!



Number of Native Shrubs Found: _____

Number of Perennial Plants Found: _____

Native Perennial Plants

These non-woody plants die back every winter but grow back from their roots each spring. This means they tend to spread each year, thus they are not mapped.



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Blue False Indigo, *Baptisia australis*
An upright, 3-4ft perennial featuring clover-like bluish-green leaves. Purple flowers extend in spikes from the foliage in spring. Seed pods are large (up to 2.5inches long) and turn charcoal black when ripe. Seeds rattle in ripe pods.

Canada Goldenrod, *Solidago altissima*
This upright 4-5ft member of the sunflower family has large branched clusters of tiny yellow flowers. Blooms in September and can spread rapidly.



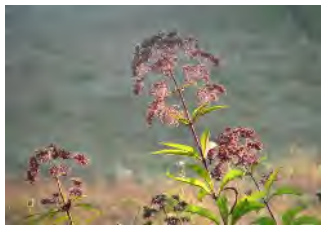
CC BY-NC 2.0 Paul Cooper



CC BY-SA 2.0 by Urjsa

Cup Plant, *Silphium perfoliatum*
With a towering (up to 8ft tall) tough stalk, this perennial has leaves which grow in pairs forming 'cups' around the stem. These cups can collect rain water. Flowers are a light yellow and bloom from July through September

Joe-pye Weed, *Eutrochium fistulosum*
This 4-7ft tall clump forming perennial has dark green leaves growing up to 12in long. A mid-summer bloomer, Joe-pye Weed has large clusters of tiny pink/purple flowers that have a vanilla scent.



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Smooth Aster, *Symphyotrichum novae-angliae*
Growing about 2ft tall, this perennial has dark blue/purple daisy-like flowers which bloom in September. Its leaves are rough and hairy, up to 4in long. Flowers are attractive to butterflies.

True or False: Rain gardens are eyesores that will lower property value.