Soak Stories

MASSABESIC AUDUBON DEMONSTRATES HOW RAIN GARDENS PROTECT THE LAKE AND PROVIDE HABITAT TO BIRDS AND BEES

In addition to the miles of walking trails, learning center, live animals, and numerous events and displays, nature lovers now have another reason to visit the Massabesic Audubon Center in Auburn – a lovely rain garden.

This demonstration rain garden at the Massabesic Audubon Center in Auburn captures stormwater from the Center's roof. Rain gardens are shallow flat-bottomed bowl-shaped gardens designed to hold rain water and allow it to slowly soak into the ground.

The center's new rain garden contains bird and bee-friendly plants – great for pollination – such as bee balm and hyssop. It is centered by a serviceberry shrub that will provide food and cover for the many birds visiting the nearby feeders and bathing in the bird bath.

Rain falling on the back of the Center's main building is captured by a gutter and downspout system. At the bottom of the downspouts, buried extenders direct rain water straight into the rain garden's bowl-shaped depression. At the end of the extenders, blue flag irises and a few flat rocks help to stabilize the area that first receives the flow. The water then spreads out, moves through the flat-bottomed garden to water all the plants, and then slowly soaks in.

The serviceberry shrub will provide food and cover for the birds who frequent the feeders.

INSTALLATION DAY

The rain garden installation day was a great success. From around nine in the morning until noon time, ten people – including DES staff and three student volunteers from Student Conservation Association NH (SCA NH) based in Bear Brook State Park – dug out and shaped the rain garden. Some of the sod was removed in large pieces to be used later to build a berm; because the rain garden was built on a slightly sloped area, the lower edge needed to be built up with a berm to match the level of the upper edge. Much of the soil dug out to form the bowl-shaped garden was carted away to make a path elsewhere. Some of the soil was retained to mix with top soil and compost to make a planting bed for the rain garden plants. After a hard morning's work, a much-needed lunch was enjoyed on picnic tables under the Center's huge fruit trees behind the building.

Soak Up the Rain installers dig out the hole for the bowl-shaped rain garden. Some of the material, like sod and native soil, are kept nearby on tarps to re-use when the rain garden is being built.

After lunch, five people remained to build the berm, mix the soil, plant the plants, and dress it up with mulch. The berm was built by piling the sod upside-down along the low edge and covering it with mulch and plants. The plants were placed according to their space needs and with an eye on mature heights and colors to ensure a beautiful garden. For added beauty and function, a bird bath was installed with a few stepping stones to it for easy maintenance. The garden and berm were finished with a layer of mulch. A stone overflow area was built in case the rain garden receives more rain water than it was built to handle. As a final step, the garden got a good watering. The day went very well and the garden looked beautiful. In addition to providing habitat for the birds and a learning opportunity for visitors, this rain garden soaks up an estimated 17,340 gallons of roof runoff each year, which prevents 2.34 pounds of sediment, 0.01 pounds of phosphorus, and 0.13 pounds of nitrogen from running off of the property. Soak Up the Rain staff will visit the garden periodically to check be sure it looks great and is functioning as expected.

RAIN BARREL DISPLAY

Visitors can also view a rain barrel display just outside the back door of the main building. Rain water from a portion of the roof is directed into the rain barrel by a gutter and downspout system. The captured rain water can be used to water flowering plants or just be allowed to empty slowly and soak into the ground.

FOR MORE INFORMATION

To learn how to build your own rain garden, install a rain barrel, or to find out about other ways to manage stormwater on your property, explore the Soak Up the Rain NH website at www.soaknh.org.