

Rain Gardens Support Pollinators

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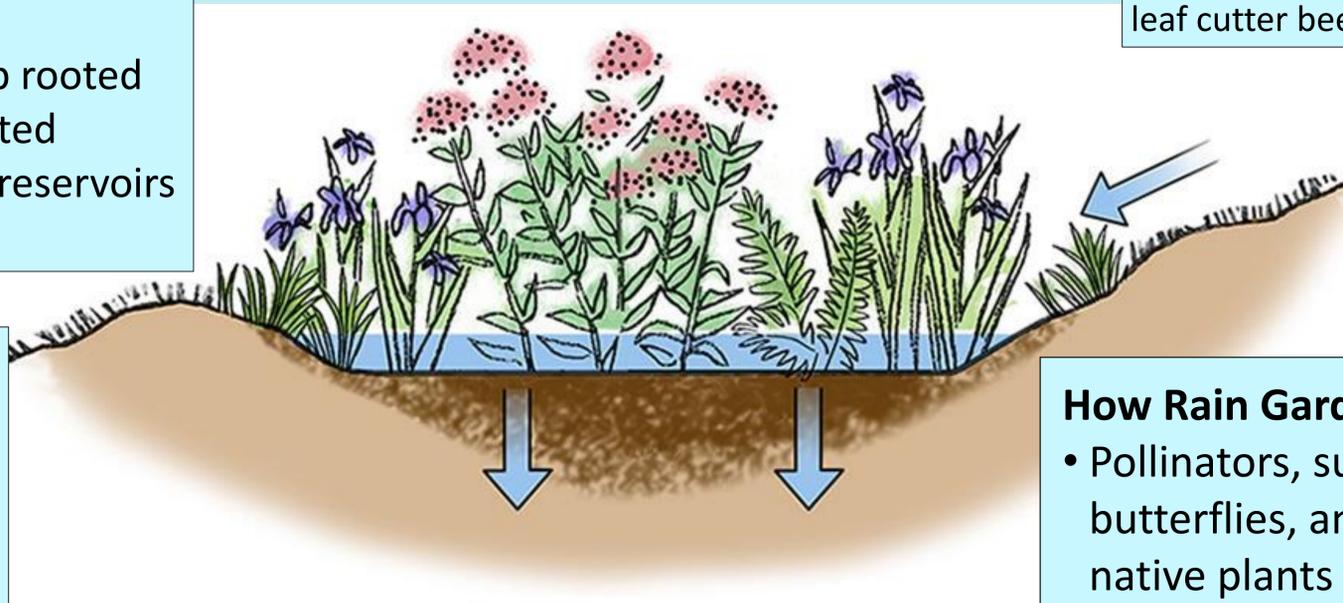
Purple Coneflower:
Attracts bumble bees, eastern tiger swallowtail butterflies, leaf cutter bees



What: A garden that lies below the level of its surroundings, designed to absorb runoff.

- Runoff is directed from impermeable surfaces to rain garden
- Water is slowly filtered through deep rooted plants, toxins and pollutants are diluted
- Clean water recharges groundwater reservoirs

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Purpose:

- Beautiful and efficient way to collect rainwater runoff
- Reduces strain on stormwater management systems
- Recharges groundwater
- Reduces flooding and soil erosion

How Rain Gardens Help Pollinators:

- Pollinators, such as native bees, butterflies, and honey bees prefer native plants to exotic or introduced plants
- Rain gardens provide habitat and food sources to pollinators throughout the season



Swamp Milkweed: Attracts monarchs, hummingbird clearing moths, skipper butterflies



Fragrant Hyssop: Attracts long-horned bees, small resin bees, silver spotted skipper butterflies, great spangled butterflies



Native Plants in Rain Gardens:

- Native plants are adapted to the local environment and can handle extreme weather compared to non-native plants
- Typically rain gardens are needed where the soil has a high clay density, but native wildflowers and prairie grasses are adapted to break up the soil. They help to maximize water infiltration and prevent water pooling.
- Native plants do not require extra care after establishment.
- Native prairie grasses have deep roots that absorb water and hold soil in place.



Bibliography
 Feehan, K. 2020. Gardens for water and pollinators. University of Nebraska-Lincoln. Retrieved from <https://water.unl.edu/article/lawns-gardens-landscapes/gardens-water-and-pollinators>
 Holm, H. 2014. Pollinators of native plants: attract, observe and identify pollinators and beneficial insects with native plants. Pollination Press LLC, Minnetonka, MN.
 Morandin, L. A. and Kremin, C. 2012. Bee preference for native versus exotic plants in restored agricultural hedgerows. Journal of the Society for Ecological Restoration, 21(1):10.1111/j.1526-100X.2012.00876.x
 Russell, Z. 2000. Rain gardens. Landscape Architecture, 90(7):24. Retrieved from <http://www.jstor.org/stable/44674778>
 Schmidt, R., Shaw, D., and Dods, D. 2007. The blue thumb guide to rain gardens. Waterdrop Innovations LLC, WI.
 Watershed Protection Department. 2015. Benefits of a rain garden. Watershed Protection Department, Austin, TX. Retrieved from <https://www.austintexas.gov/blog/benefits-rain-garden#:~:text=Another%20major%20benefit%20of%20rain,they%20can%20produce%20our%20food>
 Wheeler, J. 2018. Rain gardens are a win/win. Xerces Society. Retrieved from <https://www.xerces.org/blog/rain-gardens-are-winwin#:~:text=Planted%20with%20deeply%20rooted%20native,all%20manner%20of%20aquatic%20life>