

Micro-climate – Small is Big!



Microclimates are exactly as they sound- they are small habitats that may differ from the surrounding environment by maintaining its own temperature or moisture conditions.

Photo: Tracey McCann

When gardening for nature, one aspect that might go unnoticed is that of the microclimate. A "microclimate" is simply a small area with a temperature or humidity different than the surrounding area. These tiny habitats provide critical areas for a huge diversity of life in our gardens. Think about the last time you flipped over a log; what did you see? You may have noticed that the soil under a log is damp, that the area is a little cooler than the surrounding area. You have noticed fungi and moss growing under the log. Perhaps you saw some invertebrates like centipedes and snails, or maybe a salamander. All of these animals depend on the micro-climate under a log to survive.

People often think that naturalizing their tiny yards won't make a difference to the bigger picture of global habitat loss. When we take the role of the microclimate into account, our yards become much more than tiny half-acres. They become whole other worlds inhabit by tiny, specialized communities of plants, fungi, and animals.

Creating microclimates can be one of the simplest and most effective acts you can do as a gardener to create habitat for wildlife. First, look at your garden.

Do you have a lot of open, sunny areas with dry or sandy exposed soil? This can be an ideal microclimate for plants that like well-drained soil such as coneflowers, and for solitary mining bees that like to make their nests in exposed sandy surfaces. Place plants evenly apart to allow for open soil that bees like to make their nests in. A few logs and pieces of woody debris can enhance this habitat even more.

Another microclimate you can create is a pond or water garden. This can be as simple as digging a shallow pit and lining it with rocks, then filling it with water. The moist and cool conditions around your new pond creates habitat for insects like dragonflies and amphibians like frogs and newts. Water-loving plants like willows, swamp milkweed and cardinal flower will grow great in these conditions and provide nectar for pollinators like bumblebees and butterflies.

Do you have a lot of mature trees and shade? This can become the perfect microclimate for shade-loving forest plants like mayapple, Jack-in-the-pulpit, trilliums, and currants. These plants then create even smaller habitats under their leaves that can be used by salamanders, wood frogs, and even ruffed grouse. Who doesn't like getting a visit from a ruffed grouse?

Gardening for nature is all about changing our perspective. The small acts we take, such as enhancing habitat we already have, can have a huge impact. We all have a responsibility to protect nature and enhancing our lawns to create microclimates is a great step forward.