

Plant Communities

When you are out in your garden this season, try a shift in thinking. Instead of focusing on what you want from the garden, consider what your plants want. The big shift in horticulture taking place now is in thinking about plants not as individual objects but as communities of interrelated species.

What Makes Plants Happy?

What makes plants happy was the topic of a New York Times article written by well-known horticulturist Margaret Roach (***Understanding What Makes Plants Happy*** by **Margaret Roach**, New York Times, April 30, 2017)

As Margaret Roach observes, traditional garden design often isolates plants, treating them as individual objects in a sea of mulch, as the photo below illustrates.



But, like us, plants are social beings. Take a walk in the woods or through an untended meadow and notice how every inch of soil is covered by a network of interconnected plants.

We can learn from and be inspired by the layered structure of the natural world. Take for example Butterfly weed (*Asclepias tuberosa*). Margaret Roach points out that height of its flower is exactly the height of the grasses it grows among naturally. It has narrow leaves that hug the stem so that the plant can efficiently push through a crowded mix, and a taproot that drills through the fibrous roots of grasses.



If you were to add Butterfly weed to your garden, you would make it happy by “drifting” it throughout your beds, rather than clumping it, and by tucking some low grasses, such as Prairie dropseed, in between.

Plant Communication

The idea that plants growing together develop mutually beneficial relationships may not be too surprising. But it goes even farther than that: plants also communicate.

In his wonderful book, *The Hidden Life of Trees*, author **Peter Wohlleben** reveals how plants use the senses of smell and taste for communication.

Imagine the African savannah and a group of giraffes feeding on the foliage of African acacia trees. Not long after they begin to feed, the group abandons the trees and moves off to another clump a distance away. This odd behavior was explained when it was discovered that the tree being eaten had a means of fighting back. It reacted by pumping toxins into its leaves, making its foliage unpalatable. Astonishingly, the trees close by did the same thing. How do they know? They knew because the first acacia tree gave off a warning gas, as a sign to neighboring trees that a threat was at hand. The giraffes must have been familiar with the routine, because they knew to move on to a distant stand of trees that would not have received the warning.

Gardening in a New Way

Imagine gardening in a new way, one that is in harmony with how plants grow and interact with each other in nature.

In his book, *The Know Maintenance Perennial Garden*, landscape designer **Roy Diblik** lists some common gardening tasks that may actually be detrimental to the plants, such as:

- Rototilling every new planting space regardless of site conditions.
- Incorporating large amounts of compost or manure into every planting area without regard for plant preferences and site conditions.
- Deadheading immediately after bloom simply because that's what's done.
- And the list goes on.

If you can come to understand your plants and their inter-relationships, you will find that caring for the garden takes far less time because the plants exist in largely self-sustaining communities.

When you plant in communities, you manage entire plantings, not individual plants.

It's a win-win situation: If you give the plants what they want, there will be less work for you to do!

