

## Gardening for an Evolving Landscape

Wild landscapes are the product of robust ecological succession. They are the result of plant communities coming and going, shaping and improving the environment. We believe that our designed gardens should be as well. The most successful gardens adapt and grow. Toward that end, garden design should plan for the future, ongoing growth and change. By modeling ecological succession, we can create dynamic and resilient gardens.

When designing conventional gardens, we are frequently tasked with creating a mature, complete garden upon installation. In turn, our gardens are installed and maintained as if they are stagnant spaces. This approach is widely used, but has inherent problems and difficulties. In these conventional gardens, we are constantly clearing vegetation and exposing the soil to sun, wind, and water. These disturbances are ideal for early successional species. This includes prolific weeds and invasive species. In turn, our system allows these undesirable plants to have a perpetual presence in our gardens.

Rather than allow these weeds to take hold, many beneficial and beautiful early successional plants can be employed in those spaces. These include many annuals, biennials, and short-lived perennials, fulfilling varied roles within a landscape. Many, including verbena, *Rudbeckia triloba*, and *Monarda punctata*, are good at filling gaps quickly and easily, serving as placeholders for more permanent, longer-lived plants. Utilizing these species can provide first season splendor; don't wait for a garden to become "finished" to appreciate its beauty. They can also provide quick gratification for impatient clients, while other plants are still small. The goal is to create spaces that will evolve, natural succession patterns as our guide.

These fast-growing species also provide important roles in improving ecological health. They can help to provide fast shade for slower-growing, longer-lived perennials, shrubs, and trees. Quickly establishing plants protect soil from erosion by rain or wind, and prevent soil microorganisms from bleaching in the sun. Their roots hold moisture and move carbon through soil layers. When they decompose, they add nutrients and carbon, further improving the soil.

Early successional plants are more tolerant of what we consider inhospitable conditions, such as extremely poor soils and drought. Some even prefer these conditions. If a site is not ready to accommodate many of our favorite garden plants, these plants can help to prepare the site for further succession. They are a great solution to difficult spots: the areas of the landscape that defy cultivation, consistently struggling to develop thriving plants. As conditions change, and the garden matures, these plants will typically reduce in prominence, and longer-lived perennials, shrubs, and trees will fill into their place. Short-lived plants typically have generous, long blooming flowers which can bring pollinators and beneficial insects to the site. These include *chamaecrista*, *pluchea*, and *Monarda citriodora*, which are self-sowing annuals and pollinator magnets.

As successional gardens mature, they should become more nutrient rich and complex, and therefore suitable for more diverse species. Diversity in your garden translates to resilience in your garden. Plant populations are dynamic, naturally migrating and shifting, with the help of wind, rain, and birds. Observation over time allows us to adapt and know our gardens intimately. When a particular plant species does very well, you can encourage it further. When soil becomes densely covered by living ground covers, weeds do not take root as easily.

Allowing landscapes to evolve is important for long-term ecological health and productivity. We can build rich soil, store water, create niche conditions for interesting plants, and provide habitat for fauna. Embracing our gardens as more self-reliant, dynamic landscapes can also reduce our inputs, including fertilizers, herbicides, pesticides, watering, and frequent plant replacement. This can help change us become watchful, studied stewards of the garden. Our gardens will be resplendent, but we will also appreciate the wonder and beauty in their evolution.