

Build Soil to Eliminate Weeds

Richard Sidy, President
Gardens for Humanity

A healthy forest or grassland does not experience the problem of invasive weeds that people have to deal with in their gardens or cultivated fields. Weeds are a result of the impact of human activity that has disturbed native environments and removed topsoil and organic matter. Weeds play an important role in plant succession that aims to restore the health of soil. They are, in a way, beneficial opportunists that have come to heal the scars of highway, land development or earth laid bare.

Weeds thrive in conditions where other plants could not survive. They send their roots deep into dry compacted soil and pull nutrients to the surface. Their roots play host to micro-organisms and provide channels for the penetration of water, and when they drop leaves, seeds and die they are restarting the biological cycle that will build soil. The foliage of weeds shades the earth and makes micro-environments where other, more fragile organisms can grow.

The Village of Oak Creek occupies two Arizona plant zones: the upper limit of the high desert grassland and the lower portion of the Piñon-Juniper belt. As we hike in the undisturbed parts of our neighborhood we have many examples of healthy, weed free environments. The understory of the trees and shrubs are weed free because of many years of undisturbed accumulation of leaves that have created a natural weed barrier of mulch and organic matter full of life.

As gardeners, if we wish to create natural landscapes and weed free vegetable and ornamental gardens at our homes we need to mimic nature. Since most houses have been built on land that has been scraped and re-arranged by the blades of backhoe and bulldozer we need to take part in the process of restoring the soil. If we do not repair the soil, we will be inviting deep-rooted invasive weeds that will come to do the job for us.

Herbicides, the preferred quick fix of many suburbanites and factory farms, will only perpetuate dead soil, disrupt the development of healthy bio-systems and put other beneficial organisms at risk such as reptiles, birds, bees and other insects that keep nature thriving and in equilibrium.

Home gardeners can promote the healing of earth quite simply by “growing the soil.” We need to accelerate the process of nature by surrounding the plants we introduce with deep layers of organic mulch. These will not only be natural weed barriers, but they will keep soil moist reducing the need to water, and provide nutrients that the plants and micro-organisms will use to enrich the soil.

Mulch, in concert with plants can also prevent excessive and damaging runoff during a rain by allowing water penetration in the landscape like a sponge, something that a hardscape or denuded surface cannot do. Instead of sending our organic matter to the landfill, it can be a free and beneficial asset to soil building. Even if you do not compost,

a layer of fall leaves will decompose naturally, increase life in your garden, and saving water.

A founding principle of Gardens for Humanity is that people can enjoy nature more while taking part in its growth and health. The home garden is a small-scale and friendly place to practice environmental stewardship by learning to work with nature, and by inviting it to share your home. Weeds are a sign of neglect and disruption of nature, while they provide important first aid to wounded landscapes. We promote education and support the efforts of the many nature oriented non-profits in our community that are dedicated to preserving soil, water, plants and wildlife. Together we will make it a healthy and beautiful place to live.