

CAN WEEDS BE BENEFICIAL?

So, you missed applying the pre-emergent again last fall and weeds are growing up everywhere! It appears they do not grow so much faster because they are weeds, but . . . they are weeds because they grow so fast!

The culprits we call weeds or things that we don't plant and grow like weeds are considered as a "symptom" of a flawed situation rather than the problem. For example, weeds in our lawn turf can be precipitated by too much water and grass roots rotting, too little water and grass roots growing up to meet the water instead of growing downward in the soil, or a mowing height too low and scalping of the turf causing bare spots where weed seeds germinate and flourish.

Actually, weeds aren't all that bad but, rather, simply misunderstood plants that have somehow fallen out of favor! On the downside, weeds are known for reduction in crop yields when they compete for water, nutrients, and sunlight, which are three of the four Environmental Factors that affect plant growth. Some weeds, like nut grass, release chemicals from their roots that are harmful to surrounding plants. And weeds can be alternate hosts for pests and pathogens.

However, weeds do bring nutrients and water up from deep in the soil and out of the air and subsequently make them available to microbes in the soil and other plants. Some weeds break up hard clay and compacted soil and control erosion. They increase the organic matter content of soil as they grow and die and cycle through their lives. Weeds don't generally grow well in great soil so they indicate our soils need organic material or nutrients. They often fix nutritional imbalances by improving our soils in a couple years, in a decade or in a century! Have you ever shoveled in a wildflower field and noticed the friability of the soil??

Weeds often provide food for microbes in the soil and homes for beneficial insects that are predators of "bad" insects and also provide nectar and pollen for pollinators and early honeybee arrivals in the Spring, many times before most garden flowers have begun to bloom. Some weeds are used as forage food for animals and some even have a palatable taste for human consumption (not necessarily recommending the eating of any in this article).

Weeds check wind, water, and soil erosion and protect our environment and our streams. Just like grasses that hold our soils in place by their many root hairs and tap-rooted, or plants with one long root that break up compacted soils, our weeds do the same things . . . just grow much faster by design. When weeds die and decompose on top of the soil, they provide nutrients for plants with shallow roots. These weeds are called Dynamic Accumulators and include comfrey (*Symphytum* species), dandelions (*taraxacum officinale*) and chickweed (*Stellaria media*).

Scientists are taking a renewed look at a holistic, sustainable Integrated Pest Management (IPM) system utilizing weed plants. In corn fields, the appearance of milkweed is helping to control the European corn borer by harboring aphids that attract parasitic wasps or Trichogramma to control the borers by laying eggs on the caterpillars, which cause their death after hatching and eating the pest from the inside out. Weeds, too, can prevent pests from finding our garden plants because their presence disrupts the positive cues pests use to locate their food.

So, the next time you feel down and out because you have a weedy lawn or garden, think outside the box, because those weeds may actually be your friends!