



## One of Nature's Tricks for Gardeners

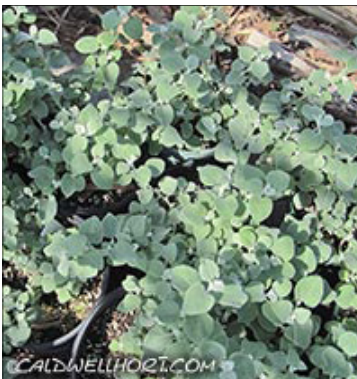
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You probably know that the path to a good garden is in the soil. Did you know that you can build soil just like nature by following its “top-down” and “bottom-up” plan?

The “top -down” method nature uses is the constant dropping of leaves that decompose into fluffy matter. We can supplement nature by piling on the organic matter and using deep mulches. The mulch quickly composts in place, producing organic matter and making our soil loose and ready for plants to absorb nutrients. Once we get our garden to the mature stage, it will cycle for us.

The complement to the “top-down” method is the “bottom-up” soil building, and is done with plants. In nature, fertility comes from the vegetation and soil life, not from a bag of fertilizer. (I admit, I have resorted to the bagged fertilizer because I could not wait for nature!) Many plants are very proficient at pulling nutrients from deep in the earth and siphoning them to the surface where other plants can use them. These types of plants generally have long taproots which pull up important nutrients, such as nitrogen, phosphorus, potassium, magnesium, calcium, sulfur and others, and concentrate them in their leaves. As they lose their leaves in the fall, the leaves decompose in place and the nutrients build up in the top soil, ready to be absorbed by the next batch of plants.

Licorice *Glycyrrhiza glabra*



Some of these “nutrient accumulators” are yarrow, chamomile, fennel, lamb’s quarters, watercress, chicory, licorice, dandelion and plantain. There are 84 plants that have been identified as nutrient accumulators. Three of these: Lamb’s quarters, vetches, and yarrow accumulate the three elements in purchased fertilizer (nitrogen, phosphorus, and potassium) in addition to other elements. Many of these nutrient accumulators are considered weeds, where in nature they are considered pioneer plants (growing where no other plant can survive). Their cycle is shoot up, die and feed the soil. Then, when the soil is more nutrient rich, they die off permanently. While you are in the process of improving your soil, think about planting some of these nutrient accumulators among your vegetables or flowers so they can draw nutrients from deep within the soil, rot and naturally fertilize your plants. When your soil is healthy, you can pull those shoots, if they even come up. Incidentally, many of these accumulator plants also have medicinal benefit.



In a vegetable garden, harvesting will constantly remove nutrients, so the fertility will have to be replaced with additions of mulch and compost, or fertilizer. But, if you have nutrient – accumulating plants in the garden, the task will decrease to almost nothing. Together, the “top-down” and “bottom-up” will quickly generate the best soil for your garden.

Fennel *Foeniculum vulgare*



Lamb's Quarters  
*Chenopodium album*