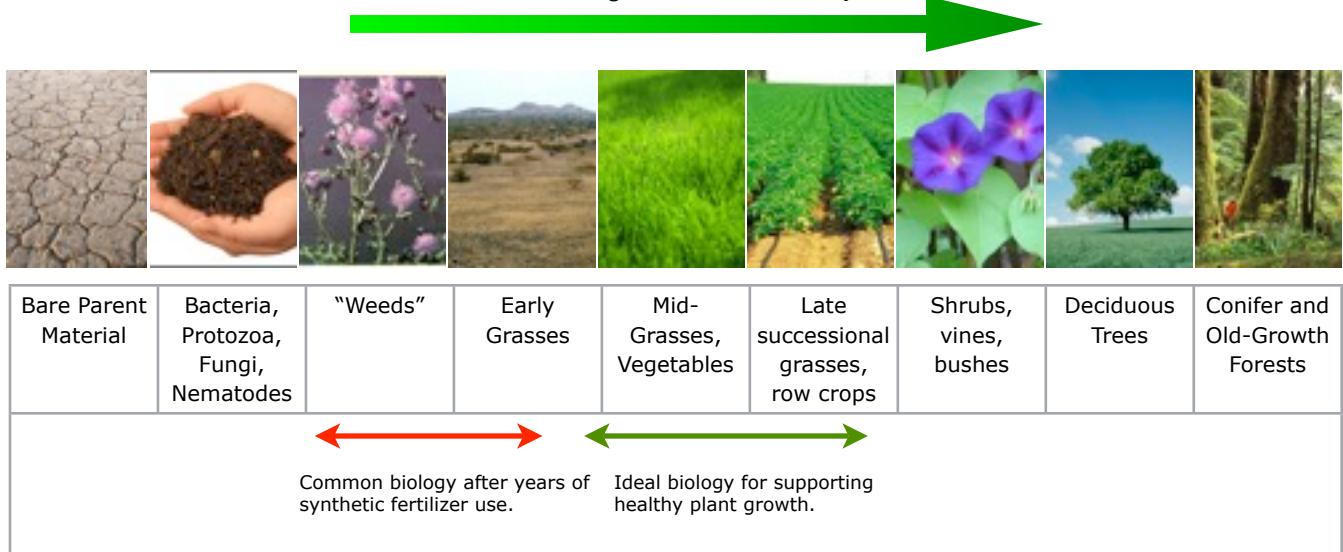


Natural Soil Evolution, occurring over thousands of years.



### The Dilemma of Conventional Crop Management Programs:

Let's review a little soil biology. As shown in the above illustration, Soil's natural evolutionary process starts with bare minerals devoid of life, and progresses all the way to old growth forests. Each ecosystem has a unique biological footprint that is ideal for the type of plant growing there. The entire process can take thousands, even millions of years, and moves in a predictable pattern.

Events like volcanoes and fire and floods, can force the soils biological evolution to take steps backwards. The use of synthetic fertilizers and herbicides have the same impact as a flood or fire. The biological soil tests we have conducted have shown the same biological footprint as that of a weed field, as indicated by the red arrow. When the time comes that herbicides are banned or limited in their use this approach collapses and the battle for supremacy is won by the weeds.

Traditional plant management programs consist of a "kill the weeds feed the Crop" approach. The results are immediate, and often great looking crops because nutrients are uploaded instantly. Over the years the amounts of synthetic fertilizers required to produce a good harvest has increased to a point where the very biology nature has used to provide nutrients from the soil have either been killed off or reduced to a level that they no longer cycle the nutrients to the crop. This makes the crop totally dependent on inputs for nutrients. The farmer is now caught on a treadmill of always adding more and more inputs in order to get a good harvest.

Ideally, the biological footprint for crops should be in the green arrow range above. The corresponding soil biology is designed to work in a symbiotic relationship with the crops to provide the nutrients required, thus reducing inputs, for healthy crops while at the same time creating an environment that weeds do not like.

EnviroPerfects' approach is unique in that we focus on the health of the soil. Our program works on restoring the right biological footprint in the soil by applying nutrients specific to the micro-biology desired in the soil. This causes the populations of these organisms to grow rapidly and the various levels of the ecosystem to re-establish themselves. We also can add beneficial microorganisms to the soil to accelerate this process. At the same time we recognize that the crops are harvested off the land taking nutrients with them so there will always be a need to add inputs. With a healthy and functioning Soil Foodweb the soil can now provide some of the nutrient required for a healthy crop. We suggest you gradually reduce the amount of fertilizer to support the crop during this process to determine optimum levels for your requirements. The result is savings in your input costs making farming more profitable. EnviroPerfect can do in 3-5 years what mother nature would normally take a hundred to do. Our goal is to help re-establish a functioning Soil Foodweb.

## The Soil Food Web

The Soil Food Web is the interconnected system of micro-organisms in the soil beneath the turf. They do the hard work beneath the surface which keeps the crops above looking great and thriving. With proper root structure, earthworms, proper bacteria and fungi, and other organisms, crops can receive most of the nutrients from the soil. These organisms work in symbiotically with the crops to convert organic materials to inorganic ones that the crops can readily use. This symbiotic relationship also encourages the roots to go deeper to obtain food and water making crops more drought tolerant in the hot dry summer. Left on its own the natural evolution of the soil supports and nurtures the plants growing in that particular ecosystem. Unfortunately the use of synthetic fertilizers and herbicides have kill off the very microorganisms we would like to encourage causing the Soil Food Web mechanism to stall making the crops solely dependent on outside amendments for food.

