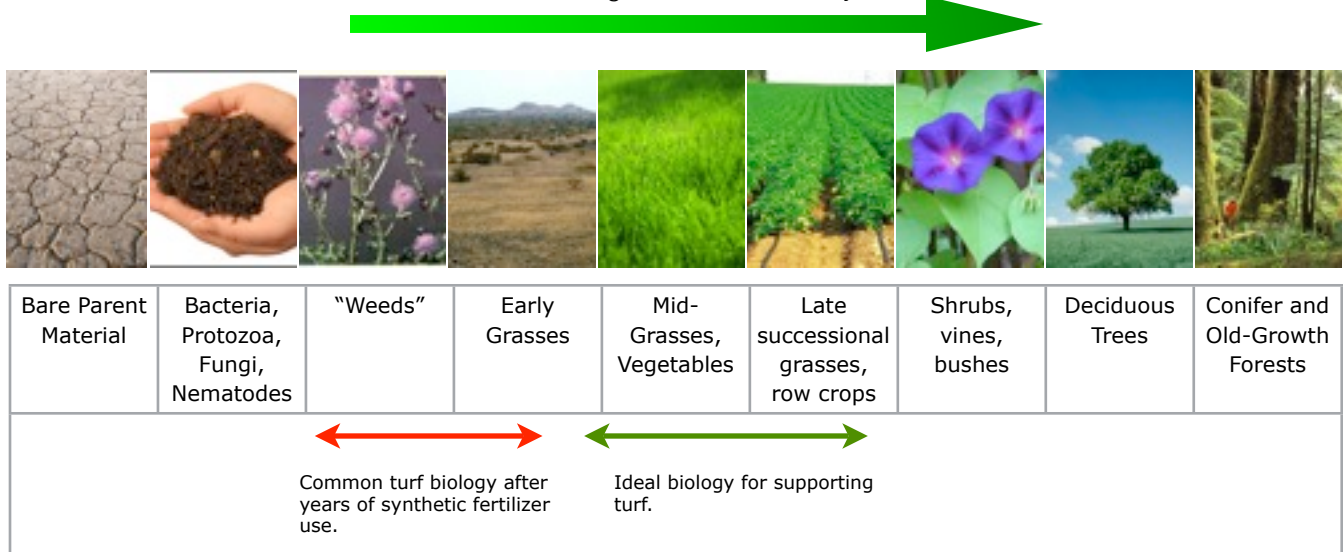


Natural Soil Evolution, occurring over thousands of years.



The Dilemma of Conventional Turf 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. Biological soil tests of most turf have shown the same biological footprint as that of a weed field, as indicated by the red arrow. Traditional turf management programs consist of a "kill the weeds feed the turf" approach. The results are immediate, and often great looking turf because nutrients are uploaded instantly but this is like spoon feeding and pampering the turf to the point where it can't stand on its own. When the time comes that herbicides are banned this approach collapses and the battle for supremacy is won by the weeds. Ideally, the biological footprint of sports fields and other play spaces should be in the green arrow range above. The corresponding soil biology is designed to work in a symbiotic relationship with the turf to provide the nutrients required for healthy turf 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 not simply replacing synthetic fertilizers with organic ones. 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 add beneficial microorganisms to the soil to accelerate this process. At the same time we recognize that the turf is use to being spoon fed so we use our custom blended organic fertilizer to support the turf during this process. EnviroPerfect can do in 3-5 years what mother nature would normally take a hundred to do, and which synthetic fertilizers and herbicides are constantly standing in the way of. 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 turf above looking great and thriving. With proper root structure, earthworms, proper bacteria and fungi, and other organisms, turf can receive most of the nutrients from the soil. These organisms work symbiotically with the turf to convert organic materials to inorganic ones that the turf can readily use. This symbiotic relationship also encourages the roots to go deeper to obtain food and water making the turf 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 turf solely dependent on outside amendments for its' food.

