The "Era of Recycling" is upon us. Look around our world today and see all of the recycling efforts taking place. In many communities, there is curbside pick-up of aluminum cans, plastics, and newspapers. Backyard composting of leaves and grass continues to gain popularity.

Nearly all organic fertilizers are recycled products. Most people's idea of organic fertilizer is manure. While this is true, products such as sewage, sludge, compost, plant, and animal proteins also make up organic fertilizers. The manure and sewage sludge products usually have lower analyses and can have odor problems. Animal and plant proteins offer the highest nutrient level. These are available in the form of feather, blood, bone, and fish meal.

Organic Mechanics

Almost everything that enters a plant is either produced in, or moves through the soil. After being activated by water and temperature, the organic matter feeds the microorganisms that feed the plant. However, if the temperature drops below the point required for the organic fertilizer to break down, all nutrient release will stop. When the temperatures rise again, the remaining WIN (water insoluble nitrogen) will release its nourishment. The organic matter acts as a sponge collecting and storing nutrients and water until the plant can utilize them. This natural process makes for healthy soil as well as healthy plants. Plus, organics are totally used and not wasted.

Organic fertilizers provide a slow, sustained, and even release of nutrients, feeding plants for up to several months. They can also provide a degree of safety from burning. When burning occurs, the salt from the fertilizer draws moisture away from the plant, producing turf burn. Organic fertilizers have a very low salt index, which in most cases eliminate burning. This makes organics an excellent choice during the summer months when drought and heat stress are greatest.

The Process Of Soil Recovery

Another way organics help is by improving the foundation of the turf—the soil. Soils low in microbial activity and organic matter need help to recover. Organic fertilizers enrich the soil by adding organic matter and microorganisms. As these components are increased, macroorganisms such as earthworms are attracted and convert organic matter into humus. This process begins to improve the soil and that in turn feeds the plant. As earthworm populations increase, compaction problems are decreased due to tunneling. This creates spaces for water, air, and nutrients to be stored and encourages deeper root growth.

Research

Current research at major universities such as Cornell, Ohio State, and the University of Georgia is underway on organics. Many attributes are being evaluated, such as fertility qualities, water-holding capacities, nutrient availability, longevity, and antagonistic effects on turf fungus. Studies have shown excellent results, particularly from the high quality animal proteins. Turf density, disease suppressions, and color enhancement have shown definite improvement from the use of these products.

Once soil is restored to health through good soil management practices—combined with solid turf management practices—the incidence of turf disease should decrease. That in turn means reduced dependency on chemicals. Used properly, organic fertilizers a safe, sound, and environmentally sensitive preventive medicine.

Editor's Note: Mike Crossen is with Nature Safe in Cold Spring, KY.