

## **Fertigation - think about putting your yard on a diet**

We hear all the time about our eating habits and how they affect our health. Inhaling one huge meal a day isn't the way to stay healthy.

The same goes for lawns. Getting your turf to sip its water and nibble its food will make it happier, stronger, save water, prevent water pollution, and save you money in the process.

The most advanced technology used to accomplish this is called fertigation; fertilization through the irrigation system. The concept has been popular in the agriculture industry and golf course industry for some time due to the scale of operations and its economic benefits. The basic idea is that very small amounts of fertilizer are delivered to plants on a continual basis. Ideally, the water given to the turf and plants is decreased as well, so that though you're fertilizing almost all the time, the amount of food and water is much less than normal.

Actually, the common ideas about feeding a landscape are completely backward, if you look at the discoveries that fertigation experts are making.

Problems with typical lawn building can be compared to ill attempts at preparing a skinny adolescent to be a star football player. You give him ten glasses of water a day, and then after a couple of months he gets a huge meal and some steroids. He's not going to bulk up or even be healthy.

Watering lawns when they don't need it keeps plant roots shallow and leaches nutrients out of the root zone. At the first sign of brown in the summer, the reaction is to water even more, further depleting the soil.

Another problem is the way fertilizer is commonly applied. A huge "meal" of fertilizer is thrown down. It causes hyper-growth for the first few weeks after you fertilize, and when growth slows a new load is applied. Coupled with common irrigation practices, these mega-meals cause much of the fertilizer to wash past the root zone and instead leach into groundwater supplies and surface water bodies where it becomes pollution.

To address this problem and provide food in the tiny, continual doses that are necessary for an optimal feeding schedule, fertigation manufacturers have developed equipment that can be installed right into the irrigation system. On commercial properties, many of these units can tie into the irrigation controller. But there has been a major push for residential fertigation units that are attached to the water spigot coming out of the house.

In recent years, manufacturers have made it economical for small applications, like residential and commercial landscapes. While the philosophy and goals of fertigation are consistent among these manufacturers, the approach and design of the units differ from company to company. Manufacturers can be found from a web search.

Once the delivery system is determined, there is the fertilizer to think about. Most manufacturers have their own blends of fertilizers. Varieties take into account the plant type and soil type. Some offer different blends depending on the season. Many manufacturers are not picky about whose fertilizer is used and even accommodate granular types.

Although granular types have salts that can clog sprinkler heads, and some are acidic and will eat away at metal, these problems can be overcome with relatively inexpensive magnetic water treatment units that naturally balance pH for corrosion prevention, and also prevent scaling and salt accumulation (among other benefits to irrigation systems and plant growth).

Of course, it is very important that the watering rate and feed rate be adjusted to apply the least amount of water, fertilizer, pesticide, and herbicide. This is important both from an economic standpoint and an ecologic standpoint, since wasted water and chemicals do harm rather than good and cost money.