

In recent years, many state and local governing bodies increasingly elected to impose bans or restrictions on the use of turf fertilizers containing phosphorus. These agencies are trying to blame turf fertilizers for polluting streams and lakes with phosphorus, but these same agencies do not consider how much of the pollution comes from farm fields and other sources. The agricultural community across the country has too much political clout for most legislative bodies to mess with. Instead, they take on easier targets like the turf industry. In most instances the legislators passing the laws have very little knowledge of the importance of phosphorus to plants of all kinds. Even when the evidence is presented to them they ignore it and proceed with passing new laws to regulate phosphorus so that they appear to be politically correct. A few years ago Dr. Wayne Kussow from the University of Wisconsin conducted field trials that proved that run off and leaching of phosphorus from turf areas was extremely small. He presented this data to several governing bodies while they were deliberating over proposed laws. Yet these people felt that they had to be politically correct so they passed the laws and no one paid any attention to the facts.

What legislators have failed to realize is that phosphorus is vitally important to plant health, and no plants can be grown indefinitely without phosphorus. It is vital for root growth and for all of the chemical reactions within the plant. Energy for all chemical reactions within the plant comes from adenosine triphosphate, commonly referred to as ATP, which is a phosphorus containing compound. Phosphorus is also a vital component of all the enzymes in the plant that govern such things as cell division and photosynthesis. Without these compounds no plant can exist for long.

While most soils do not contain adequate levels of phosphorus, soil tests will reveal that many soils have fairly high levels of phosphorus, but much of it is tied up in chemical forms that plants cannot use. Each year turf uses up some of the phosphorus in the soil and after a few years problems can ensue. Back in the 1970s some one came up with idea that phosphorus was responsible for the proliferation of *Poa annua*. Of course no one wanted *Poa* so most golf course superintendents began demanding zero phosphate fertilizers. Like all other *Poa annua* control schemes that I have seen over the years, limiting phosphorus did not work. The *Poa annua* continued to proliferate. However, after several years of applying these zero phosphate fertilizers many superintendents began to experience turf problems. When soil tests were run it was discovered that the soils were deficient in phosphorus. By that time most superintendents had long ago given up on controlling *Poa annua* so they just went back to applying fertilizers containing phosphate. Much of the same thing is going to happen on soils where phosphorus has been banned by these new laws. This time however, it will take a change in the laws to allow it to be once again applied to turf.

The phosphorus in Nature Safe is less likely to leach or run off than traditional chemical forms such as super phosphate and triple super phosphate. That is because all the phosphorus in Nature Safe is derived from steamed bone meal and it is in a chelated form. That simply means that the phosphorus is hooked to an amino acid, which makes it much more available to the plants. It does not get tied up in the soil due to adverse chemical reactions, but it is a form of controlled release fertilizer that does not leach out of even sandy soils. Because it is more available to the plants, steamed bone meal phosphorus can be used in more limited quantities and still supply more than adequate phosphorus to the plant. Nature Safe supplies not only the highest level of nutrition to the plant, but also supplies it in the forms that are most available to the plant, and phosphorus is no exception. In addition, it is the safest and the most Earth friendly fertilizer available today.