How Do You Do...?

The Question — How Do You Test Your Soil - and How Often?

Answered by Craig Potts, Texas A & M University

We have sand-based and native soil fields and they all get treated differently. Football and track are sand-based, baseball, softball and soccer are native soil.

On the baseball field, we’ll do a soil sample in March and then again in October. Since we already know what our native soil has and our programs are already established, the rest is mostly just a visual thing.

On the football field, we do soil samples every couple of months just to check on the pH, etc. But mainly on that field I like to rely on tissue samples. The tissue samples give me more of an idea of how the plant is utilizing the available nutrients and what the plant actually needs. For the tissue samples, I go out with a pair of scissors and get about 1/2 a bag full of blades from maybe 10-15 different areas on the field for testing. Last year we did this just about every week.

With basic programs already established, we can pretty much do a visual check on the rest of the fields.

Answered by Ross Kurcab & Troy Smith, Denver Broncos Football Club

Being sand based, we usually soil test our fields 4 times per year (spring, summer, fall and winter). A native soil field could probably get by with 1-2 samples per year. Obviously, we are looking for the fertility levels in the fields, yet we are also very tuned in to looking at data on pH, CEC, Base Saturation Levels, Ca/Mg, and anything that stands out as significantly different from our last test. This is why it is critical to achieve consistency in your sampling, handling, and choice of reputable laboratories.

Start with a clean, non-rusted soil sampler. A small shovel can suffice. In general, you want to sample to the rooting depth of the crop that you are growing (in our case: Bluegrass/Ryegrass, and 6-8 inches). If your fields are compacted, and the roots only go down 2 inches, then only sample to that depth. Take enough cores from your field to get a representative sample. There is no magic number here. Our soil tests usually consist of 8-10 cores per field, taken from sidelines, endzones, and center worn areas. Break the above ground plant material off the cores, and mix the cores together uniformly. Air dry them on a clean, hard surface (usually 24 hours or so). Double bag the sample in plastic, labeled on the outside of each bag, and put them in a box that has been reinforced like a tank. You don’t want any shifting or breaking of your samples in the mail. You can save several days. Always keep your soil test results on file for comparative analysis, for this is the most valuable aspect of any soil testing program. Choose a reputable lab, and they will give you very detailed sampling, and handling instructions. Good luck!

continued on page 5
How Do You Do...?
continued from page 4

Answered by Sam Clay, Tulsa (OK) Drillers
We test our field once a year in January. We take plugs from various spots all over the field and bag them up and send them to Oklahoma State University for testing. Once we have the results, we use them to plan our fertilization program for the next growing season.

Answered by Luke Yoder, Iowa Cubs
When I take my soil samples, I try to be as consistent as possible year after year. I take a 6-inch sample of soil from five different areas of the field – right field, left field, center field, infield and foul territory – because some of these areas differ. I then note the exact depth and location of the sample for the following year. If you take a 3-inch sample one year and a 6-inch sample the next year, your results may end up being more confusing than helpful.

Using a different bag for each sample, I fill the bag up either 3/4 of the way or with 1# of material and send them to Harris Laboratories in Lincoln, NE.

I do my soil sampling once a year in the fall. If you have fertilized or topdressed, wait at least 2 weeks before taking a sample. I have found that by studying the fall samples year after year it becomes more possible to ensure optimum vigor in the spring.

Soil sampling is strictly a monitoring tool and by maintaining as much consistency as possible, we are able to track soil fertility, as well as many other results, over time.

If you are not currently on a soil sampling program, I recommend that you start.

Answered by Alan Dungey, Frontier Field
Through the first season on our new field we will do soil testing every six weeks or less, with tissue analysis between soil tests.

I usually split my tests into 3 or 4 groups. The first group is the infield; we tend to fertilize the infield a little more than the rest of the field so a separate analysis will benefit us. The second group is the foul area. Small foul areas in new parks can cause irrigation difficulties, and heavy foot traffic, so a separate test is suggested. The 3rd and 4th samples come from the outfield which I divide through center field. Samples can be divided into more groups, but keep in mind that doing so can become confusing.

Answered by Gary VandenBerg, Milwaukee Brewers Baseball Club
Being charged with the well being of a major league field can be an ominous task. Soil tests are one tool we use to develop our turfgrass fertility program. The soil test will determine the level of plant nutrients, any salt problems, soil texture and soil pH. All this information is important and must be incorporated into the program.

1. Gathering cores: We try to take cores that will give us a uniform sample of all turf areas, and infield skinned areas. The samples are taken from the plant’s root zone typically no more that 3 inches deep.

2. Sending to a lab: There are a number of different labs you can send your samples to for analysis. We try to stick with the same one because we know they will always be tested using the same techniques, which gives credibility to tests taken year after year.

3. Evaluating: When evaluating the results, we are looking for trends. If we find that levels of a particular nutrient are changing over several testings we can then change the fertilizer program to reflect that change.

This is a very brief outline of our soil testing process, but I know that it makes a difference in the quality of our turfgrass and that, when correctly done, can make the difference between a so-so field and one that is outstanding.

STM

Thank You to all of you who either donated to or participated in the raffle and silent auction. Because of the generosity of people such as yourselves, we were able to raise over $3,500. Those proceeds will be used to promote better and safer sports turf areas through education and scholarship programs throughout the coming year.

Again, on behalf of STMA, THANK YOU for making this fundraising activity such a great success

Sincerely,

Mike Trigg & Troy Smith
Raffle/Silent Auction Co-Chairs