

Turf pros can't flunk if they test clients' soils

A basic soil test gives the landscape manager a fertility blueprint and opportunity for profitable add-on offerings.

• Soil testing is a valuable part of landscape management. Golf course superintendents have known this for years.

Increasingly lawn care business owners are embracing soil testing too.

They're rediscovering (ChemLawn has long made client soil tests a part of its programs.) how much customers value soil tests. From an agronomic standpoint, soil tests of clients' properties—once every three years is probably adequate—allows a lawn/landscape company to offer a more precise fertility program.

Regularly offering professional soil tests can help lawn/landscape business people accomplish two goals:

•retain more of their present customers,

•increase revenues from substantially more customers.

It's surprising, then, how few lawn/landscape professionals routinely *sell* soil tests for client's properties, particularly in light of the modest cost and time required.

This is a service that many lawn care customers say they value. They realize that most soils aren't perfect for growing acceptable turfgrass.

Poor turf common—This is evident in the latest Pennsylvania Turfgrass Survey. Home owners and even lawn care companies listed "poor soil" as *the* worst problem they face.

Yet, while more than half the golf course superintendents in the survey listed soil testing as one of the cultural practices they regularly use in turfgrass management, professional lawn providers barely mentioned it.

A basic soil test can reveal a lot; it can tell whether the soil is acid or alkaline, and shows whether levels of potassium and phosphorus are deficient or acceptable. More complete test measures other nutrients and micro-nutrients too. (The amount of available nitrogen in the soil can change rapidly so tests for N aren't really needed.)

An informal survey by LANDSCAPE MANAGEMENT suggests that many lawn professionals build their turf fertilization programs on university recommendations. Or on what competitors do. Or can sell?

They test the soil on a client's property only when there's a turf problem, a persistant problem. On receiving the analysis of the soil on that property, they often assume that all (or most) soils in that neighborhood are pretty much the same. Then they use the same fertilization regimen on them all.

Why guess?—This is guessing, even though it usually gives acceptable results on most lawns, says Dr. Chuck Darrah, consulting turfgrass agronomist and general manager of CLC LABS, Columbus. Even so, soils can be markedly different within a community. They often vary from the backyard to the frontyard of a single property.

By not including soil tests as part of their service—a service that a client pays for either as an add-on service or built into the total cost—lawn care business people are seemingly working against their own bottom lines. They're passing up opportunities to provide legitimate and, perhaps, badly needed remedial services to at least some of their customers, says Darrah.

Likely, they're wasting product too. A prescription fertility program developed from an understanding of the soil on a client's property results in stronger turfgrass. Healthier turfgrass withstands environmental stresses, insects and/or diseases better than struggling turfgrass.

Apart from vital agronomic information, a soil test can also be a powerful marketing tool. It provides lawn professionals with expert documentation, from an independent source if a lab is used, to justify the value of their services to clients.

The valuable information gained from soil testing can and should be shared with clients to reaffirm their choice of the lawn professional as *their* lawn professional.

-Ron Hall

Taking a soil sample is simple

Some turf professionals test client soils themselves. They possess the equipment, expertise and time to do this. Typically they start by determining soil pH. Then they measure such nutrients as phosphorus and potassium.

Most lawn/landscape businesses, however, find it more convenient and cost effective to mail soil samples to a testing facility. This is relatively simple procedure, produces consistently reliable reports, and is surprisingly inexpensive.

Soil samples can be mailed either to a commercial laboratory or one at their state university. Generally, the cost is about the same.

Consult with local extension personnel, a nearby golf course superintendent, or contact the state university extension department. Then contact the laboratory to see if it has any special requirements before sending your soil samples.

To take a soil sample you need only a soil probe (available from most lawn/garden suppliers), a clean bucket, and soil sampling supplies, usually supplied by the testing lab:

a) At ground level (not thatch level) take 10 to 15 plugs (2 to 2-1/2 inches deep) from different areas of the lawn. The larger the lawn, the more samples you should take. On most lawns, it probably won't take more than five minutes to actually take the samples.

b) Don't take samples from areas where fertilizer or lime have spilled or from poorly drained areas. Either the spring or the fall, prior to fertilizing, are excellent times to take samples.

c) Keep records of how and where you took samples. Mix them together in the bucket, and then dry the soil samples. (Samples of obviously different soils in a particular sampling area should be put in individual paper bags and appropriately marked.)

d) Place one cup of the mixed soil in a container. Mark your name, address and sample number on the container for your records.

e) Provide the laboratory with the most precise information you can about plant growth in the sampling area.

f) Once you've found a lab that gives you accurate, predictable and understandable test data, stick with it so the results you get from test to test are consistent.

Professional do-it-yourself soil test kits

| Company | Name of soil tester | Purpose | Comments |
|---|--|--|--|
| ELE International Inc. Soiltest Products Div. | A-6A Soil Test Kit | Measures available nutrients and pH of agricultural soils. | Comes with 60-page soil handbook, inexpensive refill kits available. |
| Lake Bluff, IL 60044 (708)295-9400 Circle No. 310 | A-7A Combination Kit | On-site tests for complete diagnosis of soil fertility. | Rugged carrying case, booklet included, 23 lbs. |
| | Nitrates, Phosphorus, Potassium, pH kits, Soil Texture Set | Kits for specific chemical analysis. Classify soils according to clay-silt-sand content. | Soiltest, Inc., has a com- plete line of soil testing kits and apparatus. |
| Kel Instruments Co., Inc., P.O. Box 54, Wyckoff, NJ 07481 (201)847-8353 Circle No. 311 | Kelway® Soil Acidity and Moisture Tester Model HB-2 | Measures soil acidity and moisture content. Tells when to add lime; provides guide for how much to add. | Requires no chemicals. Needs no battery or other power source. |
| | Kelway® Model SST | Soluble salts tester. | Fast readings of conductivity of a soil solution. |
| LaMotte Company PO Box 329, Chester- town MD 21620 | Soil pH meters | Determines lime requirement of soil. | Three meters: analog, digital, Pocketester |
| (410)778-3100 Circle No. 312 | Turf lab field units (4 models) | Colormetric analysis of turf soils. | Can be used in field or lab. LaMotte Soil Handbook furnished. |
| | Electronic soil lab, Model DCL-12 | Tests for 15 soil factors including available forms of macronutrients, micronutrients. | The DC-1600 Colormeter instantly analyzes color reactions developed in nutrient tests. |
| | Dissolved salts meters | Conductivity reading of soil extract can be converted into readinging of total dissolved salts | Three meters: analog, digital, Pocketester. |
| Spectrum Techno- logies, Inc., 12010 S. Aero Drive, Plain- field, IL 60544 (815)436-4440. Circle No. 313 | Soil & water pH meter | On-the-spot meter to determine pH of soil and/or spray water. | LCD digital display. Power by 2 CR-2025 lithium batteries. Weight 40 grams. |
| | Cardy NO3, K+, & Na+ meters | Measures nitrate, potassium, and sodium. | Standard accessories: case, deionized water, sampling sheet, kit for 15 soil samples. |



Results of a soil test must be easy to interpret and should make recommendations to optimize a fertilization program, says Charles Darrah (right), CLC LABS, Columbus.



Joe Popovic, (left) owner of Firelands Lawn Care, Norwalk, Ohio, says soil tests provide valuable information to share with clients.