

### MLSN newsletter #24

A modern method for soil test interpretation

Hello,

My writing of this newsletter is prompted by an email I received this morning. The email was from a well-known turfgrass consultant. We had been corresponding about a different topic (OM246 total organic material testing, actually), and in closing my correspondent added this, which I paraphrase here:

Eventually, I want to introduce some of your other principles, because they are on point—MLSN and growth rate/potential—but a lot of turf managers aren't quite open to these concepts yet

I was thinking about how I might reply to that, with a brief note about why MLSN is a concept that one can understand and apply without much difficulty. And then I remembered that every time I write one of these newsletters I end up with a huge amount of material on the MLSN topic that has been produced since the last newsletter. "Why don't I put this little note in a newsletter," I thought, "and get MLSN newsletter #24 sent out before I end up with too much new stuff." So here it is.

I understand that many people either won't be aware of, open to, or ready for MLSN. To those turf managers, here's how I'd explain it. Nutrient deficiencies have no place in professionally managed turf. Nutrient deficiencies are avoidable disasters. They are avoided, obviously, by ensuring the grass is supplied with all the nutrients it can use. One has to give some thought to nutrient supply, however, because soils can only hold a certain quantity of nutrients. Especially the type of sandy rootzones that are in common use for high performing turfgrass surfaces around the world.

Many turfgrass managers will be familiar with soils that test low in potassium (K), year after year. No matter how much K is applied, the soil still tests low in K. The reason for that is obvious. That particular soil simply cannot hold much K. Therefore, a foolproof way to prevent the avoidable disaster of a K deficiency is to apply K as fertilizer in doses that match the grass demand for K. There are also soils—you may have seen these type of results too—that consistently return a soil test that is high in K, or in some other nutrient. That type of soil doesn't need any of the element that tests high, because the soil can supply, at least for now, all that the grass can possibly use.

MLSN is a modern method for interpreting soil tests for all types of soils. Soils like those just described, and everything in between. The interpretation using MLSN provides the quantity of an element that you need to add as fertilizer to ensure you have no risk of nutrient deficiency for that element, while minimizing the gratuitous over-application of nutrients that the grass cannot use and the soil cannot hold.

You might be thinking that an alternative method of soil test interpretation accomplishes the same thing. Alternative methods are perhaps intended to accomplish the same thing, but they don't do so with anywhere near the accuracy of MLSN. If you really want to supply

the grass with the right amount of nutrients, then MLSN is the best way I know of to accomplish that.

## An educational opportunity

I had a chance to work with Chase Skrubis during the U.S. Amateur Championship. He is an Extension Support Specialist in the turfgrass program at Cornell University. He has a turfgrass degree from Penn State University and also spent multiple years as an assistant golf course superintendent. I asked him about his background with MLSN, because he didn't learn about it at university or while working at the golf course.

Video clip: Chase Skrubis on MLSN

Micah: Did you learn about MLSN when you went to school?

Chase: We did not.

Micah: Did you learn about MLSN when you were an assistant superintendent?

Chase: We did not.

Micah: My goodness [incredulous]. How is it that MLSN...is something that a student and an assistant superintendent does not become aware of until they start working for Cornell?

Chase: That's an excellent question, and I think it's a question that more people and more institutions should be asking of themselves...and it's something we've seen constant improvements in turf conditions with.

When you watch that video clip, you can notice the greens at Hazeltine National Golf Club during the US Amateur. Those greens, by the way, are fertilized with soil tests interpreted using MLSN, and have been for many years. For more about turf management at Hazeltine, superintendent Chris Tritabaugh joined me in this short video and he also explained to the USGA how he manages turf with pinpoint precision. Part of that precision is knowing that the grass is supplied with all the nutrients it can use.

# Awareness, interest, and adoption

Carl Schimenti and I had a talk about how to use, introduce, explain, and understand MLSN. Carl put it in the framework of <u>awareness, interest, and adoption</u>.

#### Let's talk about MLSN

Here's a list of some upcoming events I'll be at. There will either be opportunities for you to take a seminar with me, in which case we will probably discuss MLSN at least in passing. Or, come meet me at one of these conferences and we can have a chat about MLSN. Or, if you can't make it, I'll probably be sharing slides or screencasts or handouts here.

- 41st Turf Management Equipment and Materials Exhibition, at Osaka on October 9 & 10
- Thailand Pitch Performance Workshop, at Bangkok on November 18 & 19
- Royal Turf Family Seminar 2025, January 7 at Tokyo, January 9 in Fukuoka
- BIGGA's Continue to Learn 2025, January 19–22 in Harrogate, England
- GCSAA Conference and Trade Show, February 3–6 in San Diego, California
- <u>The Canadian Golf Course Management Conference</u>, February 25–27 in Niagara Falls, Ontario
- 15th International Turfgrass Research Conference, July 12-16 at Karuizawa, Japan

## New writing about MLSN

I wrote about getting better turf conditions with more intensive maintenance. How does MLSN fit into this? Because MLSN identifies when you need to add more nutrients. That's "more intensive maintenance."

I also wrote about a turf (and soil) paradox in which "good" turf was growing in soils with lower phosphorus (P) content, and adjacent "poor" turf was growing in soils with higher P content. I gave two examples of how this can happen. Naturally, interpretation of soil tests using MLSN deals with this type of situation very well, ensuring the grass is always supplied with enough nutrients.

### More info

As usual, the PACE Turf and ATC websites are the place to get the latest updates, recommendations, and resources about MLSN and a wide range of other turf management topics. I've been sharing a larger percentage of material in PACE Turf member updates, so make sure your membership is active so you don't miss a thing.

If you have an MLSN success story, failure, or case study you'd like to share with me, please send me an email. I'd like to learn more about how people are using or not using MLSN. Maybe we can record an ATC Doublecut or have an ATC Office Hours about this topic if I get enough (or any?) replies!

Thanks for reading.

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