

# MILLE LACS SOIL SERVICE ASSN. MONTHLY NEWSLETTER APRIL 2025

#### FSA DATES, DEADLINES, OR MESSAGES

The deadline for ARC/PLC enrollment is Tuesday, April 15<sup>th</sup>. If you picked up any new land, please provide the lease agreement or ownership papers before this deadline to ensure you are enrolled in the program.

Emergency Commodity Assistance Program (ECAP) is now open. It is a direct payment based on your 2024 crops reported on your FSA-578. Applications will be mailed, but you can request to sign up via digital signature or by coming into the office. The deadline is August 15, 2025.

#### EARLY SPRING SMALL GRAIN PLANTING

With the early coming of spring and daytime highs above freezing, planting season looks like it has a possibility of arriving sooner rather than later. While it still is a bit early to get the planter hooked up for corn and beans, small grains may not be out of the question.

Corn and soybean seeds have their best chance of optimal growth when they are put into the ground when the soil temperature is around 55 degrees. While we are far

from that temperature, spring wheat, oats, and barley only need the soil temperature to be around 40 degrees for germination. Night time lows around 40 degrees and daytime temps reaching the upper 60s are the ideal temp for early growth. Small grains, once they emerge, are only tolerant to ambient air temps down to around 28 degrees but can withstand small stretches of temperatures down to 22 degrees. While frost could still happen, the odds of very cold temps coming and staying late in the year are relatively small. In the event that cold temperatures do come, snow might follow, and fresh snow on your newly emerged small grains will act as an insulator against the colder temperatures. Just be sure to watch the forecast and consider planting

#### **JOKE OF THE MONTH**

My grandfather worked in a blacksmith shop when he was a boy, and he used to tell me, when I was a little boy myself, how he had toughened himself up so he could stand the rigors of blacksmithing.

One story was how he had developed his arm and shoulder muscles. He said he would stand outside behind the house and, with a 5-pound potato sack in each hand, extend his arms straight out to his sides and hold them there as long as he could.

After a while, he tried 10-pound potato sacks, then 50-pound potato sacks, and finally, he got to where he could lift a 100pound potato sack in each hand and hold his arms straight out for more than a full minute.

Next, he started putting potatoes in the sacks.

while the weather permits, rather than rushing.





Mille Lacs Soil Service

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# MICRO NUTRIENTS - THE KEY TO UNLOCKING MISSING YIELDS

Boron increases nitrogen availability in the plant. It has several other functions in the plant as well, including a role in cell division, pollination, fruit set, and seed development. Boron carries the starch from the leaf to the grain or fruit. So when sufficient available boron is lacking, production suffers. Boron also helps in the nodulation of legumes. Certain cautions must be kept in mind. On corn, for example, if there is not enough phosphate, the boron will be thwarted and a lack of grain fill can result. Corn requires adequate phosphate and then adequate boron for proper ear fill. If nitrogen rates are high, the need for boron is always enhanced. Excessive amounts of calcium also increase the need for increasing boron levels.

Severe copper deficiencies are most common on boggy-type soils such as peat, muck, or those unusually high in organic matter. A soil humus level above 7% ties up available copper. Very sandy soils are also more likely to be copper deficient. Copper deficiencies are prevalent for high yielding crops even on good mineralized soils. Such problems can occur due to heavy applications of nitrogen or high amounts of phosphate in the soils (i.e., heavily manured soil); either of these can reduce copper availability. Copper is essential to chlorophyll formation in plants. It is also important in the reproductive stage of development, meaning better seed production. Copper helps increase the sugar content of fruits and vegetables. It contributes to better color and flavor, it helps increase storage and shipping qualities. Copper will increase stalk strength in combination with adequate potassium and manganese, which enables crops to withstand higher rates of nitrogen without lodging problems.

#### "Put your trust in us."

We've been in the business for over 55 years, we know what we're doing and we do it well. We still believe in a firm handshake, a hard day's work, and the love our customers have for the land. We're here for you from the first soil sample until harvest. If you want the best, done right & at a fair price - put your trust in us.

-Mille Lacs Soil Service Assn.

#### **YOUR GUIDE TO MICRONUTRIENTS**

# YOUR GUIDE TO MICRONUTRIENTS

for crop production

Micronutrients are those elements that plants need for plant growth, but in smaller amounts than the big players like N, P and K. Where the big guys get taken up in pounds per acre by the plant, we measure micronutrient uptake in ounces per acre. Though they may seem inconsequential in the grand acheme of things, micronutrients can significantly affect yield if they're deficient in the plant.

## IRON (FE)

Iron is needed for the development of chlorophyll in plants. It is an activator for respiration, photosynthesis and nitrogen fixation.

#### MANGANESE (MN)

Manganese activates enzymes in growth processes and helps with chlorophyll development. COPPER (CU) Copper helps in electron transport and energy capture by oxidative

BORON (B)

and energy capture by oxidative proteins and enzymes. It helps with vitamin A production and activates enzyme systems.

The UNIVERSITY OF MENDESOTS EXTENSE

## ZINC (ZN)

The most common micronutrient deficiency. Zinc aids in carbohydrate, protein and chlorophyll formation and is an important component of various enzymes responsible for driving metabolic processes.

Thank you Fog Choosing Mille lacs Goil Gegvice!