



By: Anita Speers, CCA-ON

## Meet our New Team Member

This month Lakeside Grain & Feed has welcomed a new teammate to the Forest office, **Dave Curry**. Dave has previously worked in agriculture retail and has a strong background in corn, soybean, wheat and dry bean agronomy. He holds both a Certified Crop Advisor (CCA) and 4R Nutrient Management designation. The next time you're around the Forest office, please stop by and say hi to our new team member – we are thrilled to have him at Lakeside!

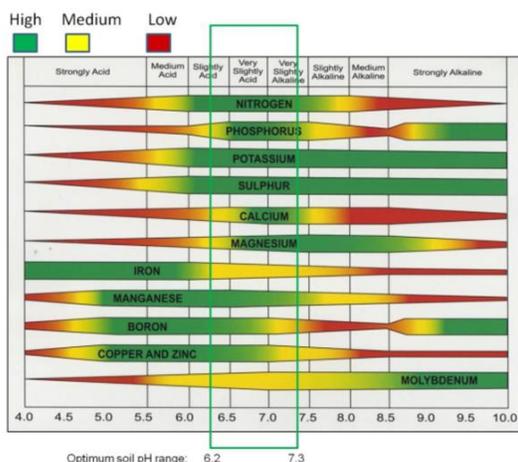


Figure 1: Optimum soil pH ranges for availability of various nutrients. For example, at a soil pH of <5.5, nutrients like N, P and K are very unavailable to your crop, but Iron (Fe) is readily available.

## “To Lime or Not to Lime” – THAT is the Question!

When you receive your soil sample back from the lab, what’s the first thing you look at? While everyone may have their preference, your eyes should first go to the pH column. Ensuring that your soil’s pH is in the correct range is the backbone to every strong fertility program.

When examining your soil’s pH, there are three categories it can loosely be grouped into: acidic, neutral or alkaline. When a soil is classified as being acidic (pH <6.5), it means that there are more hydrogen ions (H<sup>+</sup>) being held in the soil’s exchange complex than basic ions (Ca<sup>2+</sup>, Mg<sup>2+</sup> and K<sup>+</sup>), where the opposite holds true for alkaline soils (pH >7.5). Ideally soil should have a neutral pH of 7, but that very rarely occurs. Instead, it is best to have your soil’s pH within the “sweet spot” of pH ranges: pH 6.2 to 7.3. It is within this range of soil pH’s that all soil nutrients are available to your growing crop. Of course, there are exceptions to this rule, especially in the horticulture market – a crop like blueberries thrives best in a soil pH of 5.5.

If you find your soil’s pH is below the ideal range, meaning it is acidic, you are a candidate for an application of lime. Now comes time to choose your lime source: calcitic or dolomitic lime? To make the most out of your decision for lime, consider the following:

	Calcitic Lime	Dolomitic Lime
Product Highlights	<ul style="list-style-type: none"> <li>Almost pure calcium carbonate</li> </ul>	<ul style="list-style-type: none"> <li>Contains calcium carbonate</li> <li>Contains magnesium carbonate (excellent source of magnesium)</li> </ul>
Reasons to Use Source	<ul style="list-style-type: none"> <li>Soil pH below 6.5 (low end of ideal range)</li> </ul>	<ul style="list-style-type: none"> <li>Soil pH below 6.5 (low end of ideal range)</li> <li>Magnesium ppm below 100</li> </ul>

By selecting one of these liming materials, you not only are adjusting your soil pH back to an ideal range, but you are also giving your soil a source of calcium and magnesium to use for crop growth along with preventing manganese and aluminum from acting antagonistically with the other soil nutrients. If you find yourself on the other side of the spectrum with a soil pH above the ideal range (alkaline soil), sulfur becomes your soil’s new best friend. By applying elemental sulfur, soil microbes work with oxygen and water to convert it into sulfuric acid that acidifies the soil.

Regardless of whether you need to increase or decrease your soil’s pH, there are three golden rules:

1. Apply your lime or elemental sulfur a **minimum** of 3 to 6 months ahead of planting. These products take TIME to work and be effective – it can take up to two years to see the full effect
2. Work the material in your soil. Spreading it on top and willing it to work is a good way to waste money
3. Moisture is a MUST. In order to activate these products, sufficient moisture is needed