



4R Nutrient Stewardship – 4 Part Series

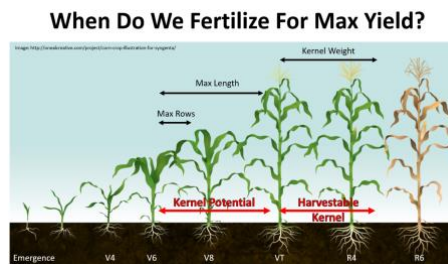
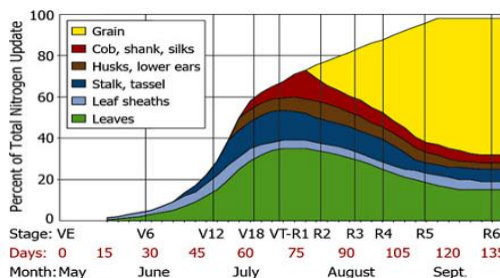
3rd R: The Right Place

Soil samples are taken to a depth of 6 inches, as the top 6 inches of soil is primarily what is discussed for soil fertility and nutrient recommendations. This measurement comes from an acre furrow slice, which is the depth a typical farm blade penetrates the soil. There is roughly 2,000,000 pounds of soil per acre in the top 6 inches of soil. Depending on the farm practice, if conventional tillage is a common practice, fertilizer and other nutrient sources are incorporated into the soil and become evenly distributed in the soil profile. If a grower is practicing no-till, over time the nutrients can start to accumulate near the soil surface and creates a stratified layer of nutrients. As nutrients build up near the surface, it increases the risk of run-off, or direct loss with soil movement. It is a good idea to get as much of the nutrients into the soil profiles as possible. This can be accomplished from a dry starter to place phosphorous, as well as potassium, sulphur and micronutrients. Another method to place higher levels of nutrients would be through strip tillage. This is where only 6-8 inches of the soil is worked and nutrients placed at the same time, leaving the ground between rows untouched.

Nitrogen Management on Corn

Corn planting is likely to commence in parts of Ontario in 50 days or less. Encouraging quick and even emergence is priority and success at the start will certainly have a positive impact on final yield. Nitrogen (N) management throughout the growing season is also a priority. N is essential to plant growth and unfortunately, this critical nutrient can easily be lost from the soil by leaching or denitrification when excessive rainfall events happen. N functions relate to making green tissue but N also plays crucial role in ear and kernel development. Only a fraction of corn plant total N needs is required at seeding and seedling stages and then N needs escalate fast as plant approaches V8 stage. During the rapid growth phase (V8 to VT (tassel)) the crop demands close to 1/2 of it's total N needs with the remaining demand post tassel. The ultimate goal is risk mitigation of your valuable N. Don't risk the crop ever going hungry and make sure that there is sufficient N available during the grain fill stage. You can spread your risk by applying N at multiple times throughout the year or utilizing a slow release source (ESN) to match N availability with crop needs. Charts included:

- show N uptake by plant throughout the season
- Importance of sufficient N from V6 to VT to positively influence the girth and length of cob (hybrids and plant pop affect response).



N uptake by corn. Adapted from Richie, et.al, 2005 (How a Corn Plant Develops).

Confirm your 2019 corn fertilizer program and available options with your Holmes Agronomy Rep. We have the knowledge, the products and the application services to help manage your N and maximize your yield opportunity.

Precision Agriculture

Adoption of technology is happening as fast in agriculture as any sector of our economy. Are you ready? According to Chad Colby a speaker on Ag Technology at the recent Ontario Certified Crop Advisor meeting, you need to have a plan. With the improvements in performance, upgrading your I-Phone or Tablet every 2 years is free based on the improved performance. Introduction of LSW (Low Side Wall) tires are allowing operators to have one tire that excels in multiple environments vs. having to have 2 sets of tires. Sensors on equipment that detect weeds and rank your fields for urgency of control provide intelligence in the data. Chad encouraged growers to have a plan that includes

- 1) Looking ahead 3-5 years,
- 2) Invest in items with proven ROI,
- 3) Look for the ability to make better real time decisions,
- 4) Calculate your own results,
- 5) Don't be afraid to fail.

Final thought, what is new today may be obsolete tomorrow, just like VCRs and Fax machines, keep learning.

Spreader Safety Reminder

With the spring rush, hopefully just around the corner, please keep in mind some important points when using fertilizer spreaders.

- Complete a circle check – tires, safety chains, in/out of gear, monitor tightness of drive belts.
- Check High/Low speed.
- Cleanliness – Ensure that spinner blades and flow divider are clean and not damaged.
- Check gate height, density and rate.
- Run at optimum tractor PTO speed (most tractors should be run around 2200 RPM), at a 40 or 50-foot interval, depending on the spreader. Avoid turning sharply as damage to the PTO shaft may occur.
- Slow your ground speed as rates increase, for optimal pattern.
- Ensure that while parked, the jack is secure.
- Do not exceed 30 mph when towing a spreader on the road, and make sure that the spreader is out of gear.
- Loads should not exceed 1.0mt when being towed behind a pickup truck.

Please contact Holmes Agro as soon as you are finished with your spreader - your neighbor may be waiting for it!

Holmes Agro – Orangeville Location Update

With approximately 50 days until spring, Holmes Agro is starting to ramp up staffing and looking to get a lot of bagged and tote product of both fertilizer and seed positioned on your farm. Stefani will be contacting you as she schedules deliveries, to ensure you are ready when Mother Nature decides it is time to go. Equipment maintenance is nearing completion as is construction on the fertilizer tower. Electricians and automation programmers have started testing the system, and we expect product testing to begin next week. We are looking forward to using the state of the art system very soon.

Holmes Agro – Stayner Location Update

Over the past few weeks the fertilizer storage has begun to take shape. The wall and roof panels are being pieced together, and the upper fertilizer conveyor is in place. Over the course of the next month the building should be fully enclosed and the building will almost be ready for fertilizer intake. The next steps for the building and tower, will be to get the electrical hooked up and get everything calibrated for fertilizer shipments. We are making progress on this construction project, and we are looking forward to spring fertilizer deliveries!



Seed Deliveries 2019

Warton Willie has predicted an early spring! We will be starting deliveries this month with your seed orders. Please let us know if you are able to take an early delivery. Delivery will be free of charge up to April 1st, 2019 for all completed deliveries.

Happy planting!

Going Paperless



Going Paperless conserves valuable resources and is more efficient than regular postal mail. Sign up for any of the following options available for Holmes Agro customers:

- **Invoices and Statements:** Contact our office staff to set up your account for paperless billing: micheller@holmesagro.com
- **Payments:** Setting up online or telephone banking is simple. Select Holmes Agro as the payee and use your 5-digit account number, which is listed next to your account name on invoices and statements.
- **Newsletters:** Please email Nicole to sign up for electronic newsletters: nicole@holmesagro.com

Calendar 2020

It's never too early to start sending in pictures for the 2020 calendar. We are proud to be able to provide a calendar full of grower pictures year after year – all thanks to your great submissions! Please email your photos to nicole@holmesagro.com