



Are You Doing it Right?

by Lynne Warriner, CCA-ON 4R-NMS, Ontario 4R Coach

What does 4R stand for?

The principles of the 4R framework include:

RIGHT SOURCE: matching the correct fertilizer type to the crop needs

RIGHT RATE: calculating the correct amount of fertilizer for the crop needs

RIGHT TIME: ensuring crops are fertilized at the correct time

RIGHT PLACE: applying fertilizer where crops can benefit the most

The 4R Nutrient Stewardship system completely covers all the decisions that need to be made about nutrient management. The 4Rs are not just about making source, rate, time and place decisions but about making the right decisions for the field.

The four aspects of fertilizer management are interconnected, and for growers to reach their maximum benefit each “R” must be addressed and incorporated into the farms crop nutrient plan.

To summarize the 4R approach remember these 4 points:

1. The principles of 4R are applying the right fertilizer **SOURCE** at the right **RATE**, at the right **TIME** and in the right **PLACE**.
2. The 4 Rights are interconnected, so you must always consider all 4R's in your decisionmaking process
3. 4R works for managing all sources of nutrients
4. 4R works for all types of cropping systems

What is Ontario 4R Certification?

Established in 2018, 4R Certification is a voluntary program designed to allow Nutrient Service Providers in Ontario to align their business practices with the sustainability principles of 4R Nutrient Stewardship.

How Ontario 4R Certification Works

Participating Nutrient Service Providers will be audited. The audit is completed by a third party at the retail location, farms are not audited. There are 37 auditable criteria divided into the following main sections:

- Training and Education (6 criteria)
- Recommendations (12 criteria)
- Applications (10 criteria)
- Documentation (9 criteria)

What does Ontario 4R Certification mean for Farmers?

The Ontario 4R Certification Program is a way for agriculture to provide external stakeholders verifiable proof that farmers are good environmental stewards of their land. The 4R program backs their actions with hard data.

End-use customers are starting to demand steps be taken by farmers to prove they are committed to sustainable agriculture. By participating in the 4R Certification program, through their Nutrient Service Provider, growers can provide food companies and large buyers with acre reports validating on-farm 4R practices.

This system also provides regulators and environmental groups a science-based approach, helping to prevent potential negative and unscientific regulation.

Audit Criteria Impacts on Farmers:

Training: Expect to hear a lot about 4R Nutrient Stewardship via newsletters and information events. You may be required to sign-in at meetings as proof of attendance.

Recommendations: Nutrient recommendations must be based on a soil test that is not more than four years old. A 4R crop nutrient plan, which is signed off by the grower, must include manure or other sources of nutrients as well as a discussion of application setbacks.

Application: Appropriate weather conditions are key. Nutrients should not be applied on frozen or snow-covered ground. Broadcast application of crop nutrients without immediate incorporation are neither made nor recommended unless a documented local weather forecast indicates less than a 50 percent chance of a rainfall event involving more than one inch of rain beginning in the next 12 hours. Adhering to proper setbacks at each farm is also critical when applying nutrients. The 4R certification program includes application standards that require 4R Certified agri-retailers appropriately address minimum setback distances from all known sensitive areas, such as tile inlets, well heads, gullies and water bodies specified in applicable national, provincial, or local laws. Furthermore, it is required that these setback distances be documented and discussed with the grower customer.

Documentation: Growers are required to sign their nutrient recommendations.

4R Nutrient Stewardship is an innovative approach to fertilizer best management practices (BMPs) to help achieve agricultural sustainability. The 4Rs imply there are four aspects to every fertilizer application, and it provides a simple framework to assess whether a given crop has access to the necessary nutrients. To help identify opportunities to improve fertilizer efficiency and prevent nutrient movement from each field ask yourself: *Was the RIGHT FERTILIZER SOURCE given to the crop at the RIGHT RATE, RIGHT TIME, and in the RIGHT PLACE?*

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Lynne Warriner is a Certified Crop Advisor and Ontario 4R Coach from Blenheim. She can be reached at lpwarriner@gmail.com

There are over 650 Certified Crop Advisers (CCA) in Ontario. Each CCA has demonstrated their knowledge about Ontario crop production by passing the required exams. In addition, they have the crop advisory experience, the education, the commitment to continuing education and have signed a comprehensive code of ethics, which places the grower's interests first.

This industry driven program helps ensure that Ontario crop producers are well served by those providing their crop production advice. This article was written by one of those CCA's.