Determining the Fertilizer-N Application Rate using the Manure Nutrient Calculator

How to determine the fertilizer-N application rate using the Manure Nutrient Calculator.

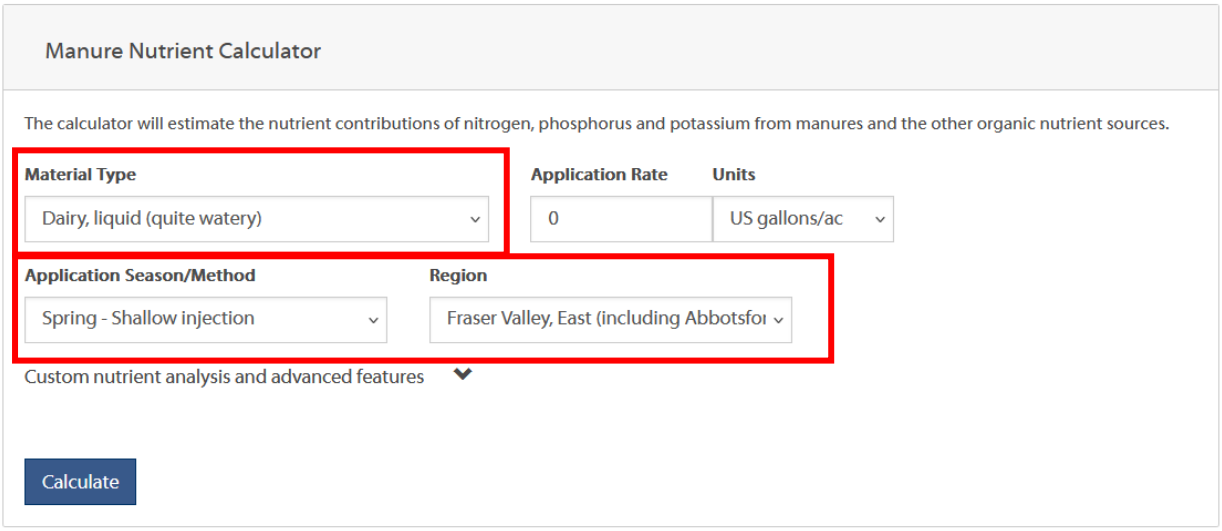
Data to collect:

- New fertilizer application rate (kg N/ha)

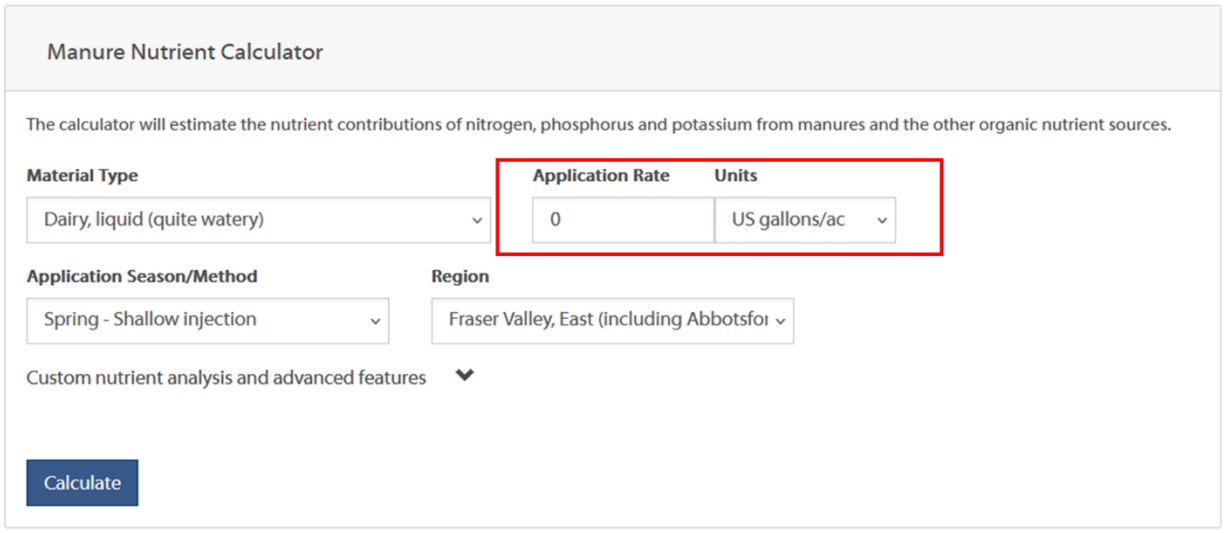
Before you begin, you'll need to know your planned **annual N application rate** – either in lb N/ac or kg N/ha. Once the amount of applied N from manure is determined, the amount of supplemental N from fertilizer will be determined by subtracting the amount of N from manure and other non-fertilizer N sources (such as compost).

Steps:

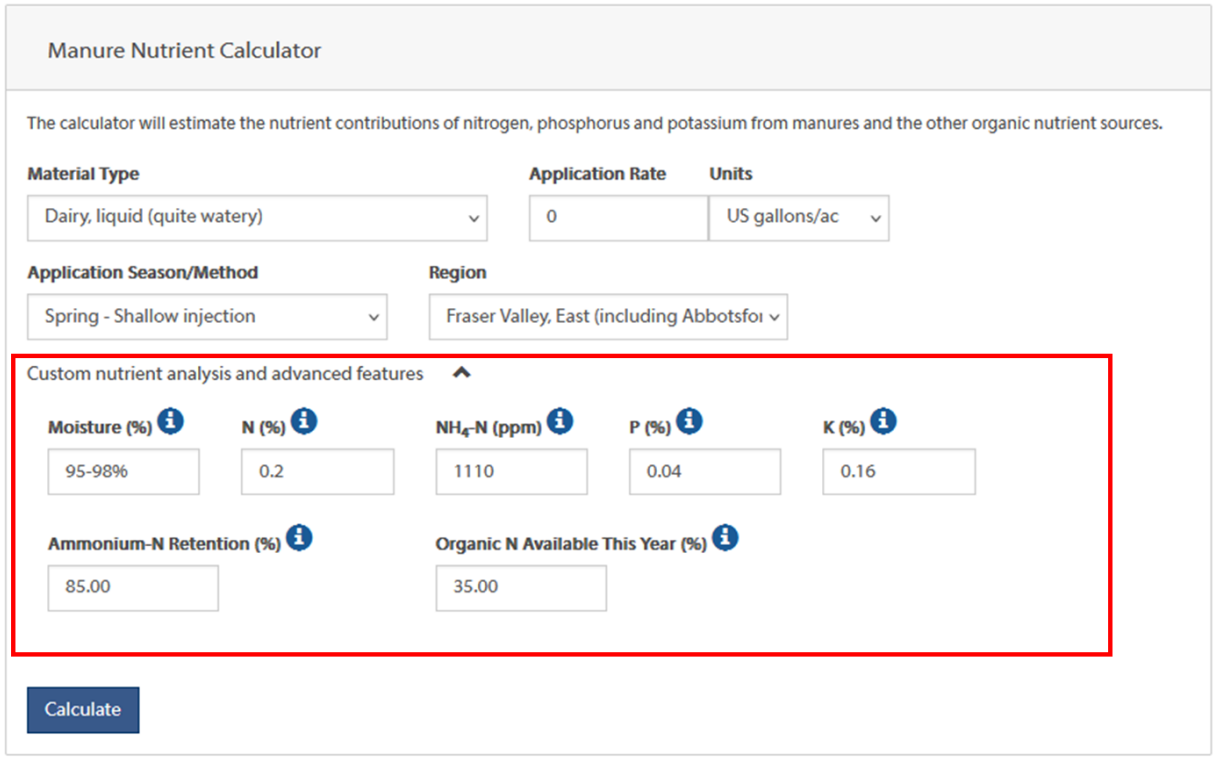
1) Navigate to the Manure Nutrient Calculator using this link: https://nmp.apps.nrs.gov.bc.ca/MiniApps/ManureNutrientCalculator
2) In the Manure Nutrient Calculator, select the type of manure being applied, the season and method that manure is applied, and the region your farm is located.



3) Enter the application rate and select the appropriate units of application (e.g. US gallons/ac, m^3/ha, imperial gallon/ac).

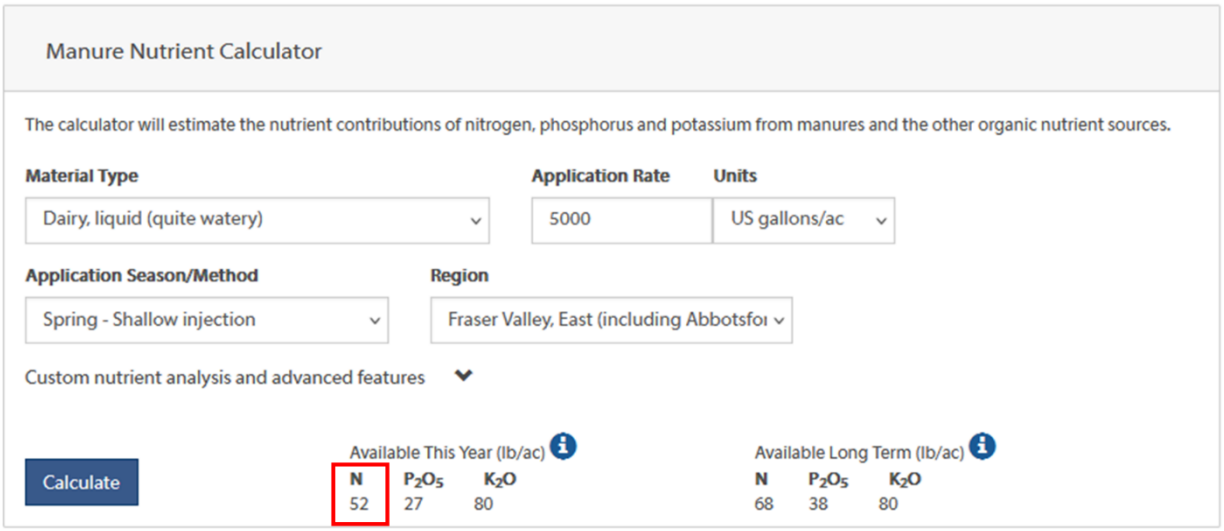


4) (optional) If you have a manure nutrient analysis from an analytical laboratory, select the 'Custom nutrient analysis and advanced features' dropdown and enter the nutrient analysis information from your lab report.



5) Hit the Calculate button. The amount of N shown under the 'Available This Year' is the amount of N supplied from that application of manure (in lb

N/acre). If there are multiple applications of manure, enter the details into the Manure Nutrient Calculator and add the amount of N from each application together.



6) Convert the amount of N applied from manure from lb N/ac to kg N/ha by multiplying by 1.12. For example, 50 lb N/ac * 1.12 = 56 kg N/ha. If necessary, convert the annual N application rate to kg N/ha as well.
7) Subtract the amount of N applied from manure from the annual N application rate to determine the amount of supplemental N required from fertilizer. For example: 250 kg N/ha – 145 kg N/ha from manure = 105 kg N/ha required from fertilizer.