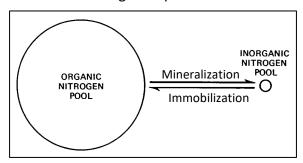


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### **NuMan Pro 5.0:** How to Use the "History" Page to Include Previous Organic Nutrient Applications

#### Introduction

Manure contains organic forms of nitrogen. This pool of nitrogen can become available over time through the process of mineralization and must be credited toward the nitrogen requirement of the current crop.



More specifically, manure, sludge, or any other organic source applied to a field in the two previous years must be listed on the "History" page of *NuMan Pro 5.0* in order to accurately account for nutrient inputs from the past.

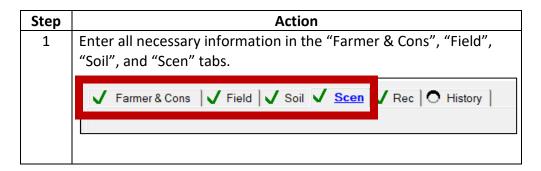
#### Contents

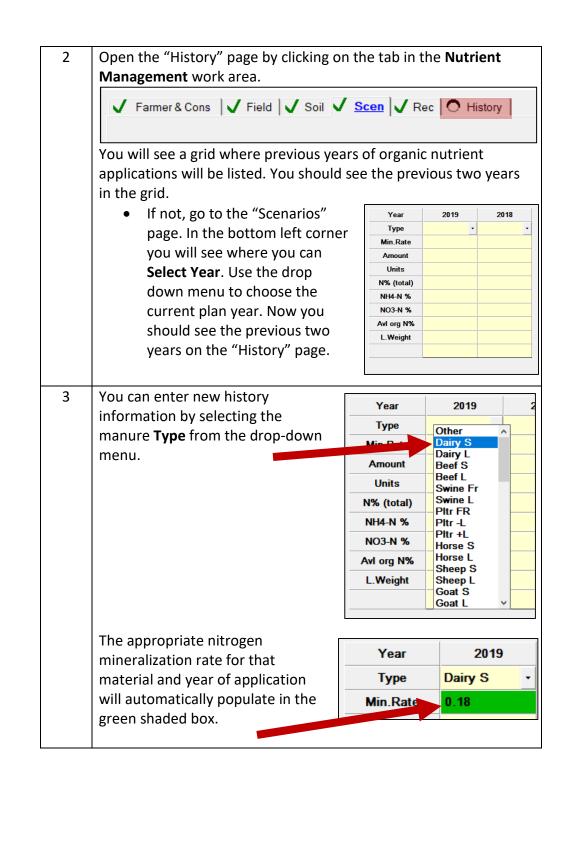
In this document, you will find instructions for:

- Using the History Page for the First Time
- Adding/Deleting Multiple Years in a Single History Year
- Streamlining Entry of History Data

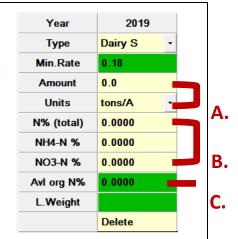
## Using the History Page for the First Time

#### Instructions





- A. Confirm with the operator that the field did in fact receive manure and the actual amount that was applied. Enter this in the **Amount** section, then select the appropriate **Units** for application rate.
  - B. Enter total nitrogen, ammonium, and nitrate content from the manure analysis done on the material.



C. The available organic nitrogen will be calculated and will appear in the second green shaded box.

Remember to save your work periodically. There is **no autosave feature** in *NuMan Pro*!

- If an operator uses an organic material that is not listed, you can manually enter details about the material, including mineralization rate, by selecting "Other".
  - Some other types of organic material must have mineralization rates input manually. These types are wastewater effluent (abbreviated W W Eff), digestate (dgst), biochar (bich), and Class A biosolids (PFRP).

<sup>\*\*</sup>Make sure you keep documentation in the client's file of the mineralization rate you choose for these materials.

# Adding/ Deleting Multiple Years in a Single History Year

#### Instructions

Step	Action				
1	Enter the first manure for the year following the instructions above.				
2	To add a second manure, double left-click on the year column heading, and a new column for that year will open. You can add up to four columns per year.	Year Type  W.Rate  Amount  Units N% (total)  NH4-N %  NO3-N %  Avl org N%  L.Weight	2019 Dairy S  0.18 8.0 tons/A 0.7700 0.1200 0.0000 0.1170  Delete	2019	2018
3	To delete a column for a year, double left-click on the bottom cell labeled <b>Delete</b> and the column will be removed.	Year Type Min.Rate Amount Units N% (total) NH4-N % NO3-N % Avl org N% L.Weight	2019 Dairy S	2019	2018
4	Remember to save your work periodically. There is <b>no autosave feature</b> in <i>NuMan Pro</i> !				

#### Streamlining Entry of History Data

#### Instructions

If you are returning to a file to update it for a new planning year, you can transfer previous manure application data from the "Scen" page to the "History" page. Remember to confirm which fields actually received manure, and the rate at which the manure was applied.

