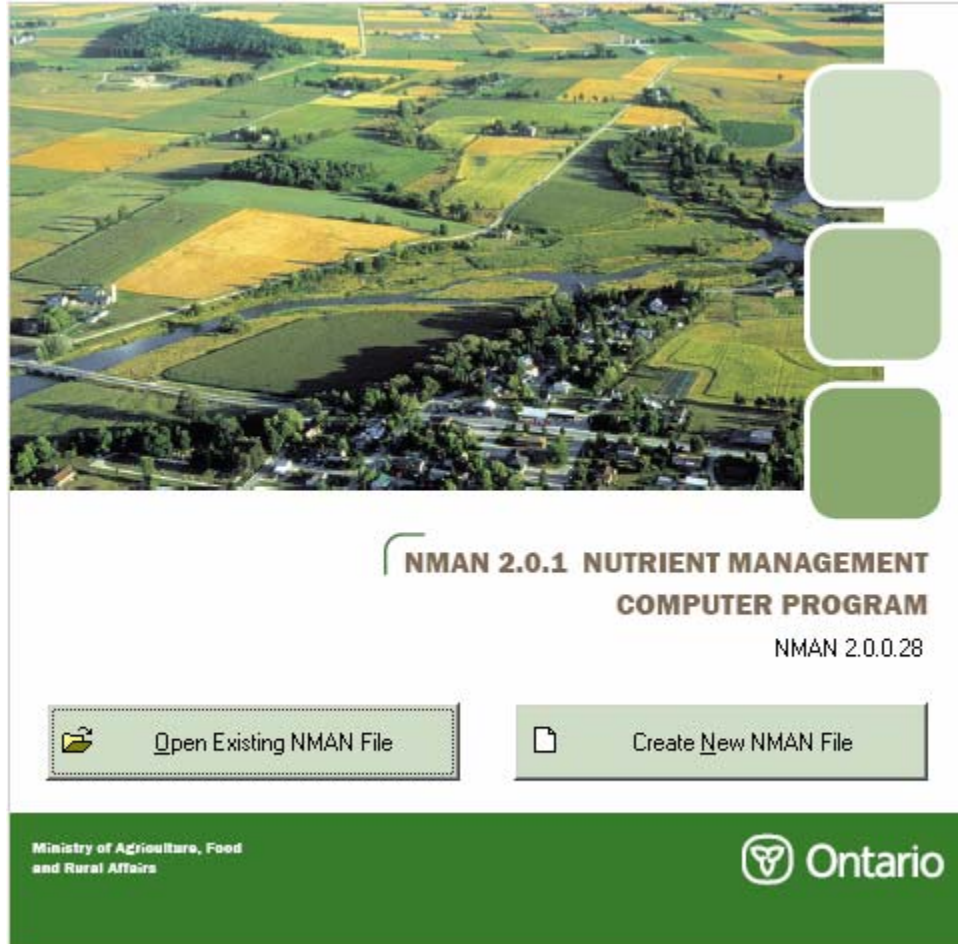


## NMAN2 – Nutrient Management Planning Made Easier



NMAN2 is a comprehensive electronic multi-year, multi- farm/field nutrient management planning tool that tracks manure from the animal to storage to field. This newest version has MSTOR as part of the program, can accommodate treatment options and has included pasturing as an animal storage and/or cropping option.

For more information about the program or to order your free copy visit the website:

<http://www.omafra.gov.on.ca/english/nm/nman/default.htm#Nman>

- The software was developed for Ontario farmers and programmed to promote BMP's, and meet regulatory standards
- Software allows the user to make adjustments to their plans and minimize risk of causing an adverse effect.

## Crop Advances: Field Crop Reports

- Green, yellow and red flags indicate profitability and/or environmental risk of various practices
- Corn nitrogen calculator is an option that is embedded in the field cropping section of the program
- Program allows user to input their Lot, Concession and Township to come up with a Google map of that property
- A comprehensive F1 help guide to answer questions as they arise

MSTOR can help you to:

- Size your manure storage
- Predict yearly manure production
- Estimate nutrient content
- Experiment with different options
- Accommodate treatment options
- Account for time that animals spend on pasture
- helps calculate N-Index and P-Index
- houses a database of manure content information

NMAN2 can help you to:

- Establish application rates
- Experiment with different management options (tillage, application rates and timing, incorporation dates, etc)
- Determine additional fertilizer needs after manure nutrient predictions
- Determine if proposed rates are out of balance
- Keep records with respect to cropping practices and application rates

### Example of Livestock Information – Manure Production and Manure Timelines

Livestock Information

Name:  Description:

Livestock Type: Sheep

Dairy and Feeder Lambs

Confinement

All In / All Out

Suggested Utilization Time: 100 %

Number:

Nutrient Units: 2.5

Estimated Barn Area: 500 ft<sup>2</sup>

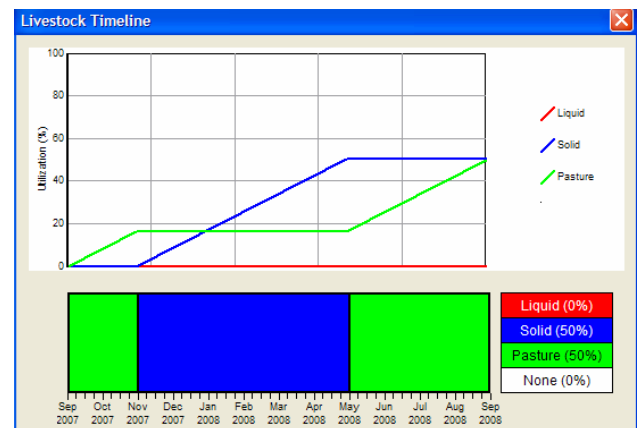
Average Weight:  lb

Weight In:  lb

Weight Out:  lb

Estimation Method:  
OMAFRA Production Values (As Stored)

MANURE PRODUCTION			
	Utilization Time (%)	Manure Production	Dry Matter (%)
<input type="checkbox"/> Liquid			
<input checked="" type="checkbox"/> Solid	<input type="text" value="50"/> %	1.1 ft <sup>3</sup> /day, 405 ft <sup>3</sup> /year	30%
<input checked="" type="checkbox"/> Pasture	<input type="text" value="50"/> %	1 GU/year	
Total Utilization		<input type="text" value="100"/> %	
No Production		<input type="text" value="0"/> %	



Example of Effect of Manure Application Details on Available Nutrients

**Material Application** ✕

<p>Description: <input type="text" value="Manure App 1"/></p> <p>Cropping Year: 01-Sep-2008 - 30-Sep-2009</p> <p>Planting Date: 01-May-2009</p> <p>Application Date: <input type="text" value="24-Apr-2009"/> <input type="text" value="Spring"/></p> <p>Material Type: <input type="text" value="Finisher manure"/></p> <p><input type="button" value="Add/Modify Material Information"/></p> <p><b>APPLICATION DETAILS</b></p> <p>Method of Application: <input type="text" value="Tanker"/></p> <p>Incorporation Details: <input type="text" value="Injected"/></p> <p>Application Rate: <input type="text" value="5000"/> gal/ac <input type="button" value="⏏"/></p> <p><b>APPLICATOR CALIBRATION</b> <input type="button" value="Use Default Values"/></p> <p>Capacity: <input type="text" value="3000"/> gal</p> <p>Application Width: <input type="text" value="30"/> ft</p> <p>Length of Time: <input type="text" value="180"/> s</p>	<p><b>Available Nutrients:</b></p> <p>N: 30.8 lb/1000gal</p> <p>P2O5 (40%): 12.0 lb/1000gal</p> <p>P2O5 (80%): 24.0 lb/1000gal</p> <p>K2O (90%): 19.5 lb/1000gal</p> <p><b>Nutrients Applied:</b></p> <p>N: 154 lb/ac</p> <p>P2O5 (this year): 60 lb/ac</p> <p>P2O5 (build up): 120 lb/ac</p> <p>K2O: 97 lb/ac</p> <p><b>Nitrogen Loss (N-Index)</b></p> <p>10%</p> <p>21.0 lb/ac</p> <p><b>Application Summary:</b></p> <p>Speed: 3.3 mph</p> <p>Thickness: 0.22 in</p> <p>Distance/Load: 880 ft</p>
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Example of Agronomic and Crop Removal Balance Screen

**Field/Section Information** ✕

AGRONOMIC NUTRIENT BALANCE				CROP REMOVAL BALANCE			
(lb/ac)	N	P2O5	K2O	(lb/ac)	N	P2O5	K2O
Commercial Fertilizer:	27	16	4	Field Inputs:	27	16	4
Nitrogen Credit:	0			This Season's Manure:	154	120	97
This Season's Manure:	154	60	97	Crop Removal:	-124	-63	-43
Production Requirements:	-49	-45	-27	Crop Removal Balance:	57	73	58
<b>Agronomic Balance:</b>	<b>132</b>	<b>31</b>	<b>75</b>	Nutrient Indices:	<b>3.0</b>	<b>14</b>	


**APPLICATION RATES**

Description	Applied Date	Type	Rate	Applied (N,P,K)	Surface Water
Manure App 1	24-Apr-2009	Finisher man...	5000 gal/ac	154, 60, 97 lb/ac	N/A
Fert App 2	01-May-2009	46-0-0	50.0 lb/ac	23, 0, 0 lb/ac	N/A
Fert App 1	04-May-2009	6-24-6	5.0 gal/ac	4, 16, 4 lb/ac	N/A

## Crop Advances: Field Crop Reports

### Example of Field Summary and Record Keeper

#### Cropping Information

Status	Crop	Yield	Plant Date	Harvest Date	Notes
Planned	Corn, Grain	135 bu/ac 	01-May-2009	01-Oct-2009	
Actual					
Actual					

#### Tillage Information

Status	Tillage Date	Method	Practice	Notes
Planned	01-May-2009	Plough	Up & Down Slope	
Actual				
Actual				

#### Fertilizer Application

Status	Description	App Date	Blend	Rate	Method	Applied	Surface Water
Actual							

#### Manure/P.Mat'l Application

Status	Description	App Date	Type	Rate	Speed	Method	Incorporation	Surface Water
Planned		01-May-2009	Material #1	5000 gal/ac		Tanker	Incorporated 1 day	N/A
Actual								
Actual								

### Acknowledgements:

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