# TIMING MATTERS 2021 MANURE USE SURVEY: FINAL PUBLIC REPORT



## **Timing Matters 2021 Manure Use Survey**

Manure is a natural part of livestock production and an excellent source of macronutrients, micronutrients and organic matter for crop production. The Timing Matters Peer-to-Peer Response Team is a coalition of farm organizations representing dairy, pork, beef, chicken, egg and sheep producers, as well as general farm organizations, soil and crop specialists and agri-contractors.

This survey was sent out through these Ontario farm organizations to help better understand manure storage and application timing issues.

There is an overall lack of data on the scope of winter manure application and farmer attitudes related to manure application and timing of application. This survey is intended to address this lack of data. Also, during the late fall of 2020, Fertilizer Canada (4R) surveyed corn growers and asked them several manure-use and attitude questions. Together these two studies provide insight into farmers' manure practices, storage capacity and whether or not they have noticed communications products put out over the last two years on the topic of manure stewardship, application options and the risks of nutrient loss when manure is applied on frozen and snow-covered ground. The group intends to repeat the survey in February of 2022.

Undertaking a manure use and attitudes survey was a requirement of project funding for the 2021-2022 Timing Matters Project. Funding was provided through OMAFRA with Great Lakes: COA funding.

#### The survey:

- First manure use and attitudes survey of its kind for Ontario livestock producers.
- Developed by Peer-to-Peer members.
- Survey Monkey link sent out through farm organizations and livestock member groups via Eblasts and weekly newsletters over four weeks.
- The link was open from February 5, 2021 until March 5<sup>th</sup>, 2021.
- Voluntary participation only, no remuneration.
- The survey was anonymous, only the County/Region and commodity type were recorded.
- Total of 282 participants.

#### Methodology:

The survey questions were developed from discussions with the Peer-to-Peer members. The survey was designed to capture basic information on the storage capacity and type of manure applied, but also included several questions designed to gauge farmer attitudes towards manure's nutrient value and how they balance crop nutrient needs, with application opportunities when the weather and field conditions are favorable and times of the year when the risk for nutrient runoff is higher. The survey asked where they get their agronomic advice and if they had encountered *Timing Matters* communications products in the farm media over the last year. The survey link was sent out through livestock commodity partners to their members and the Ontario Soil and Crop Improvement Association (OSCIA) and Ontario Federation of

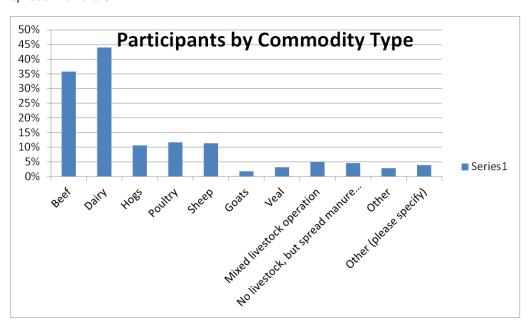
Agriculture (OFA) sent it out in member communications. The survey was voluntary with no remuneration paid.

### Results:

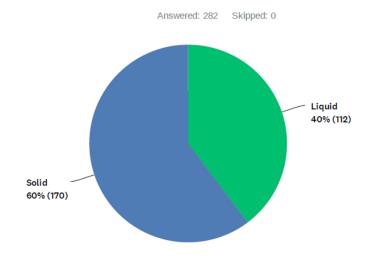
282 Farmers completed in the survey in all.

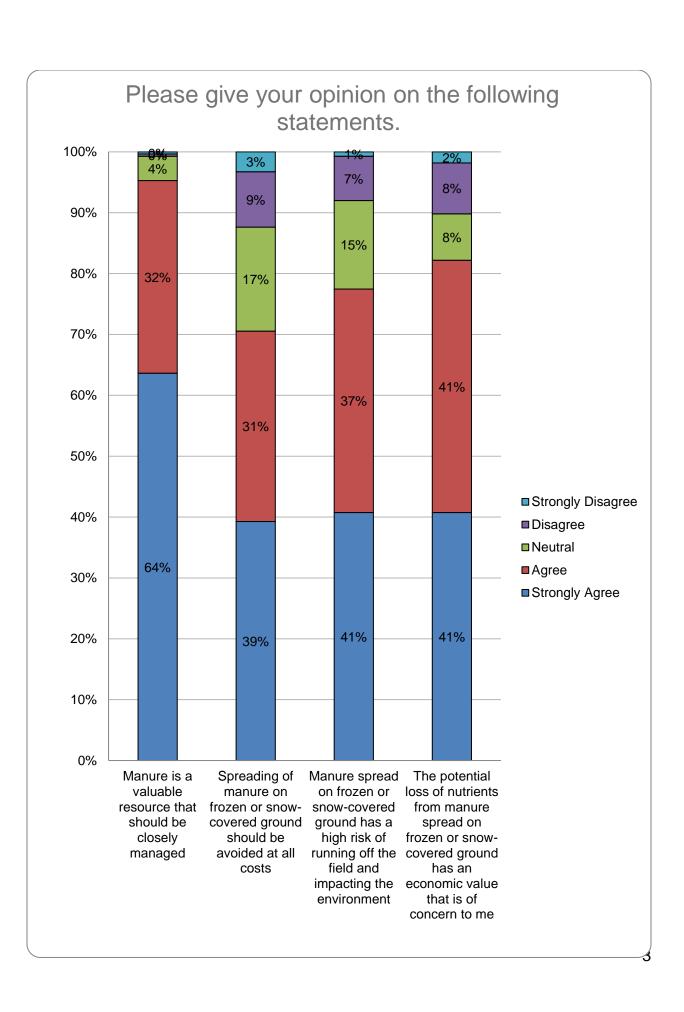
# What is the primary and secondary livestock type of your operation?

Participant's Primary livestock type: Beef 73, Dairy 120, Hog 25, Poultry 25, Sheep 23, no livestock but spread manure 9.



# Q4 What is the primary type of manure applied on your farm

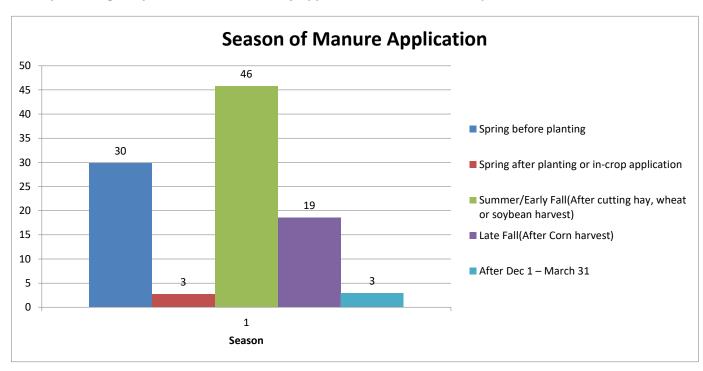




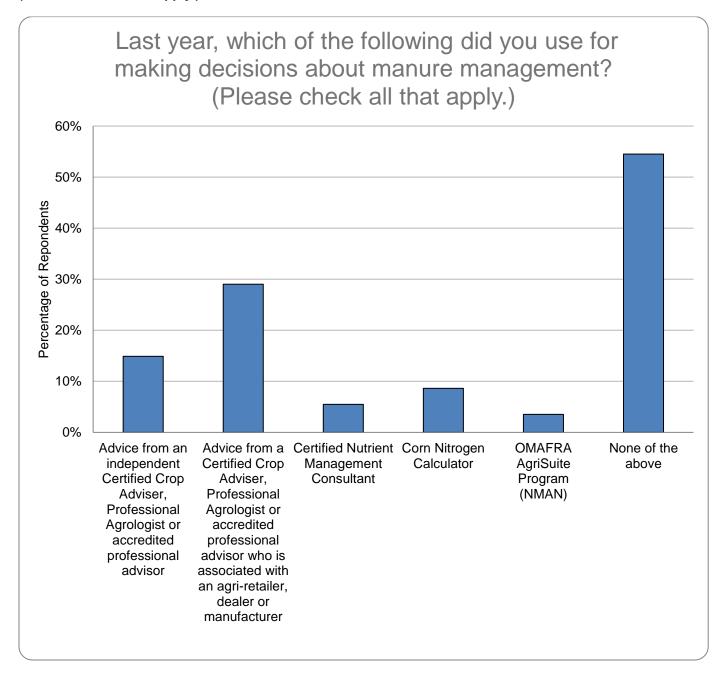
Have you seen articles in your farm commodity magazine using the Timing Matters or Peer to Peer brand that talks about the specific risks of late winter applied manure and how nutrients can move with spring thaw or late winter rains?

Yes 66% No 34%

# What percentage of your manure is normally applied in each season/time period?



Last year, which of the following did you use for making decisions about manure management? (Please check all that apply.)



#### Discussion:

Question: What was your County/District? We found out late in the survey period that we had excluded two counties from the drop-down selection, as a result, several farmers selected "other" when their county was simply not on the selection options, thus the geographic distribution of respondents should not be relied upon.

Question: Of our 282 participants - Participant's Primary livestock type: Beef 73, Dairy 120, Hog 25, Poultry 25, Sheep 23, no livestock but spread manure 9.

Question: Liquid or solid? 40 per cent liquid manure and 60 per cent indicated solid manure as their primary form.

Question: When asked about manure spreading on frozen ground having a high risk of run-off and potential impacts to the environment, 90 per cent strongly or partially agreed, however, 10 per cent disagreed with a statement a indicating that some farmers remain unconvinced of the risk of nutrient loss on frozen ground.

Question: 65 per cent of participants reported that they had seen some of the Timing Matters communications materials. Numbers were higher among dairy, swine and beef producers. This is likely related to the fact that articles have been placed in those commodity magazines over the last year and shows the need to include articles in poultry and cropping media.

Question: In what season do you normally spread what percentages of your manure question showed that even though some farmers do spread some manure in the winter the acreages are usually low. Presumably, they are just trying to get through to spring. It also shows a tremendous opportunity to apply manure to more growing crops in the spring.

Question: Asking about where or if they get agronomic advice about manure/nutrient application results indicated that about 50 per cent used an independent agronomist or agronomist at their ag-retailer or a calculator program such as AgriSuite. A 50 percent indicated they did not seek outside advice or use a calculator.

#### Conclusion:

The survey indicates that winter manure application is not a practice undertaken by the majority of farmers. The majority of farms support the statement that spreading manure on frozen ground negatively impacts others' perceptions of agriculture. Winter application of manure would seem to be undertaken by two distinct groups, those who find themselves occasionally forced by weather conditions or late harvest to apply manure in the winter, and a small percentage who have shared in the survey that they do not see an inherent risk in applying manure on frozen ground. More work is needed to ascertain if winter application is just a result of a lack of manure storage capacity or other reasons. Communications activities should continue to highlight the risks of runoff associated with late winter application and alternative strategies. Research should focus on what farmers might need to reduce the practice to one undertaken only from exceptional circumstances or unforeseen emergencies.

We thank the farmers who took part in the survey and those on the Peer-to-Peer team who helped develop thoughtful questions.

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