

Manure Spreading FAQ FACTSHEET



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Manure Spreading Frequently Asked Questions: South Coast Region

Why a manure spreading factsheet?

This factsheet, from the Manure Spreading Advisory Committee (Committee), addresses common questions from the public regarding manure applications in the south coast of British Columbia (BC). The Committee consists of representatives from the BC Agriculture Council, the BC Ministry of Agriculture, and the BC Ministry of Environment. The Committee produces Manure Spreading Advisories to provide manure spreading and management guidance to farmers and custom manure applicators in the South Coast Region of British Columbia.

Why do I see manure being moved on roads?

Manure may be moved for legitimate reasons:

1. Land Application. Manure should be applied to cropland that will benefit most from manure application, and sometimes this requires tankers to move manure on roads. Many farmers rent land, because they need more land than is available on their home farm.
2. Storage. Sometimes manure is moved temporarily to other storage facilities to avoid overflowing of manure storage facilities.
3. Processing. Manure may be exported from a farm for processing (e.g. compost facility or anaerobic digester)

Why spread manure so early in the growing season?

The Committee generally advises against manure spreading in the winter. However, as crops are emerging from dormancy, a light manure application may benefit crops. For the winter, the Committee recommends keeping manure stored or finding extra storage for manure until conditions are suitable for crops to use manure nutrients.

Does the T-Sum 200 indicate when the first manure applications of the year are allowed?

The T-Sum is one tool used to determine appropriate timing for manure application. The T-Sum is a measurement of the accumulated mean daily temperatures above 0° Celsius from January 1 at a certain location. For example, if the daily average temperatures are -2°C, 5°C, and 10°C on the first 3 days of the year, the T-Sum at the end of January 3 would be 15°C. Generally, farmers watch the T-Sum increase to get a rough idea of how quickly their grass fields are reaching the point of starting growth. Grass crops in the South Coast of BC respond well to first applications of nitrogen fertilizer when T-Sum is between 200 and 300.

More information about the T-Sum can be found at Farmwest.

Why is manure spread repeatedly on the same field in the same year?

Manure or other sources of nutrients should be applied at the right time. For a forage grass field, this means multiple applications. Expect manure to be applied before the first cut (harvest) and after subsequent cuts (Fig. 1), because these are the times the grass crop needs the nutrients. Other crops have different requirements. For example, a farmer would only want to apply manure once per year for corn, but if that corn field will have a cover crop (to reduce soil erosion and provide other benefits) after harvest, then the field could benefit from more manure if a fall soil test shows a need for more nutrients. Applying manure at the right time sometimes means applying at multiple times.

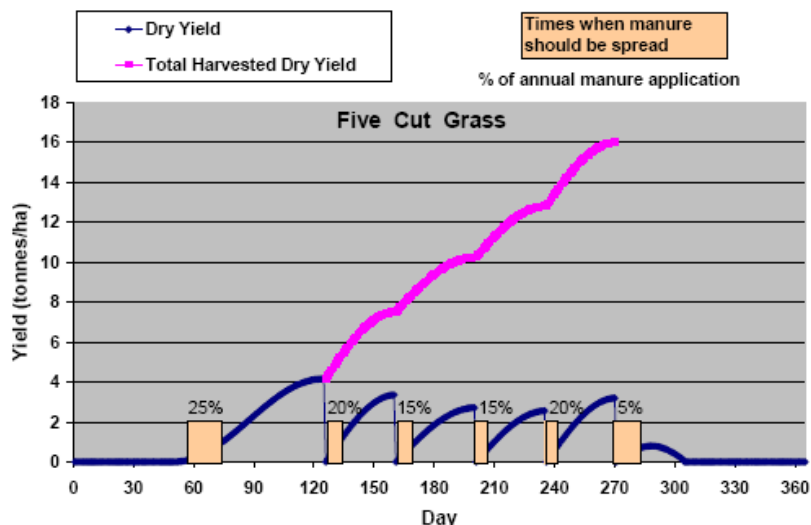


Figure 1. Typical grass growth curve and manure spreading opportunities with approximate percent of annual manure application in the BC South Coast. The times and percentages presented here should vary with environmental conditions and farm needs. Source: Nutrient Management Reference Guide (see References below).

Why do farmers use an 'aerial spray' method to spread manure?

There is no one right method for all cases of liquid manure application. Each method has its own advantages and disadvantages or limitations. The conventional method of liquid manure application in the South Coast region of BC is the 'splash plate,' which puts manure into the air at a lower height than an irrigation gun resulting in reduced ammonia emissions. Over the last decade or two, some have further reduced ammonia emissions during manure spreading by simply lowering the height of the splash plate or by using a boom with nozzles. More information is available in factsheet 631500-6 *Choosing and Calibrating Manure Application Equipment* available online.

Should a farmer spread manure when it is raining?

It depends on soil, weather, and crop conditions. On a dry soil with a crop that will take up soil nutrients before they are leached, a light rain can be beneficial. A light rain that follows manure application under such conditions can help incorporate the manure nutrients slowly into the soil for plant uptake. Farmers should and do consider their own soil, weather, and crop conditions when they make decisions about manure spreading. The Committee's spreading advisories provide more specific advice about such conditions.

Can a farmer spread manure on snow or frozen soil?

The Committee strongly discourages this practice. Spreading when the soil is snow-covered or frozen is **very** likely to result in surface runoff of manure eventually. The Committee encourages farmers to plan for adequate manure storage (including contingency storage which might be on a neighbouring farm) or planning for more application of manure (up to appropriate application rates) during times when the soil is not frozen or snow-covered.

Note that ‘frozen soil’ excludes the concept of a soil with a thin surface layer of morning frost that will melt during the daytime. More detailed guidance about this definition would be provided to producers in Advisories.

Why would one farm be spreading manure and their neighbour not be spreading?

It depends on soil, weather, and crop conditions. Weather conditions will likely be similar for two neighbouring farms. However, soil types, field conditions, and crop growth can vary significantly, sometimes even within a field that looks to be the same from a distance. Even with the same soil type, management can differ (e.g. some fields may be less compacted than others) leading to a lower chance of runoff on some fields compared to others during rain events. Farmers generally ‘walk their fields’ leading up to the first manure applications of the year. They would be looking for signs such as ponding, amount of vegetation cover, and soil moisture.

Why does manure spreading sometimes happen at odd hours?

We cannot speak for all cases, but it is possible that the manure applicator is trying to take advantage of a brief window of opportunity to apply manure while conditions for spreading are suitable. Farmers may try to spread when neighbours are less likely to be disturbed. Spreading during cooler hours and avoiding windy conditions can not only reduce annoying odours and drift but also reduce the amount and cost of fertilizer required for crop growth.

What can be done about dust from manures?

This is primarily an issue with poultry manure. Among the cheap and easy methods to address dust issues is for either the farmer or neighbour to start a conversation. All that may be needed is decent neighbourly relations and a willingness to find the best schedule for those involved. While a certain amount of dust is unavoidable, the farmer can minimize dust from manures by avoiding spreading during windy conditions and by working the manure into the soil after spreading if feasible. Alternatively, the farmer might moisten the manure before application, which might require an alternative spreading method. As with liquid manure, solid manure application methods each have their own advantages and disadvantages (economic and environmental). See the “Choosing and Calibrating Manure Application Equipment” factsheet for more information.

If I see manure draining into ditches or creeks, who should I inform?

There may be multiple reasons why surface water may be brown or yellow. Reasons for colour or cloudiness in water, unrelated to manure, include mud and humus, peat or decaying plant matter. If you think the reason is manure draining into ditches or creeks, then call one of the numbers below.

Dial toll free to report as a spill 1-800-663-3456 or to report pollution 1-877-952-7277 (RAPP).

If a manure spill occurs, what should happen?

It is the producer or farmer’s responsibility to have a contingency plan. The plan should outline a timely and effective response to any emergencies involving the release of manure products into the environment from accidental spills, equipment failures or other causes. Under the Spill Reporting Regulation, manure spills greater than 200 kg or 200 litres must be reported immediately to the Provincial Emergency Program at 1-800-663-3456 (24 hr service).

References

B.C. Good Agricultural Practices (GAP)

B.C. Ministry of Agriculture, Food and Fisheries, January 2004. ***Farm Nuisance – Dust***. Order No. 870-218-62

B.C. Ministry of Agriculture, Food and Fisheries, January 2002. ***Farm Nuisance – Odour***. Order No. 870-218-64

B.C. Ministry of Agriculture. September 2010. ***Choosing and Calibrating Manure Application Equipment***. Order No. 631.500-6

Canada-BC Environmental Farm Plan - ***Nutrient Management Reference Guide***

Canada-BC Environmental Farm Plan - ***Reference Guide – 5th Edition***, November 2010

Queens’s Printer for British Columbia. ***Farm Practices Protection (Right to Farm) Act***. RSBC 1996. Chapter 131

Agricultural Waste Control Regulation

This is the legislation that applies to manure management in British Columbia:

Manure Spreading Advisories are posted online.

FOR FURTHER INFORMATION CONTACT

Phone: 604.556.3001
Toll Free: 1.888.221.7141

MINISTRY OF AGRICULTURE

1767 Angus Campbell Road
Abbotsford, B.C. V3G 2M3