

Opinion Exchange

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Spring, and a farmer's fancy turns to ...

- ... manure. (Which, thanks to today's technology, is more useful than ever.)

By MICHAEL SCHMITT

Look around Minnesota and you see many signs of Minnesota's commitment to recycling. Containers of newspapers, bottles, cans, cardboard and plastic are left at the curb for the recycling truck. Homeowners are recycling grass clippings and even kitchen scraps to fertilize their lawns and gardens.

These efforts are small potatoes compared to what may be the largest spring recycling program in Minnesota. Just as gardeners create compost from food leftovers and scraps, Minnesota farmers use animal manure to supply crop nutrition and improve soil health. The word "manure" may bring up some unfortunate associations, but the benefits of this animal product are a very fortunate example of recycling in Minnesota.

Minnesota farmers no longer just spread manure. They combine new technology, precision soil testing and University of Minnesota research to precisely apply this valuable crop nutrient exactly when and where it is needed. Farmers systematically take soil samples from throughout their fields and then collect manure samples in their storage units. Laboratory analysis of both sets of samples give farmers the information needed for optimum alignment of application rates based on a soil's need and the manure's content. Modern engineering allows for remarkable precision in application rates and placement, with the ultimate impact being optimum yields with minimal risks to our water and air quality. University of Minnesota research shows manure application can boost crop yields by 7 to 10 percent greater than the best yields without manure.

The word may bring up some unfortunate associations, but the application of manure is quite beneficial in Minnesota, and not just to the state's farmers.

The increased productivity from precision manure application benefits not only individual farm families, but also Minnesota's economy. Using more animal nutrients to raise crops reduces our dependence on imported commercial fertilizer and keeps those dollars closer to home. The production and transportation of commercial fertilizers rely heavily on petroleum-based products. So, while farmers are using manure to make their fields greener, they are also helping Minnesota move toward a greener environment.

Minnesota is fortunate to be a national leader in livestock production, and a side benefit is that most parts of the state have a ready supply of home-grown nitrogen, phosphorus, potassium and sulfur.

In addition to the nutritional benefits that manure supplies growing plants, there are other soil quality benefits important for our land and ecosystem. Manure applications promote a soil's physical structure, termed tilth, as well as its biological system by feeding the millions of microbes and other organisms that live in our soils. Soils with well-fed microorganisms allow rainfall to infiltrate faster and retain more of this water for plant needs. The result is less soil runoff that might move to our streams, rivers and lakes. Less soil in water means fewer nutrients ending up in our water — something we all want to minimize.

Using and keeping Minnesota's resources in Minnesota serves everyone's best interests. Drive around the back roads of rural Minnesota during the spring and you are likely to see farmers spreading manure to improve their soil health and crop productivity. There's no need to stop and visit, but you might pause for a moment and, in your mind, thank them for recycling Minnesota resources and renewing the state this spring.

Michael Schmitt is a professor of soil science at the University of Minnesota and serves as senior associate dean for University of Minnesota Extension.