

Fertilizer is a forage field's friend

You can work less next summer by spending some time now looking into fertilizers: You can get the same amount of hay from fewer acres and cattle will do better on it, to boot.

A number of field trials and a lot of experience have helped the Field Green® biosolids program, and its customers, learn the ins and outs of using WLSSD's fertilizer and how to get the best results.

One key lesson is that fertilizing can pay off.

You'll get more hay, to be sure.

But you'll also get better hay, and need fewer acres to supply your needs.

More hay or alfalfa and better quality are nice. Even better for Field Green® customers is the chance to farm fewer acres and save time to get the same results.

So how do you do this? First, look at your soil test report. Field Green® customers get soil testing for free and if you need to see a copy, just call us. Soil test results include fertilizer recommendations, and that's the starting point.

If you need help developing a plan, a local Extension agent or an agronomist with a fertilizer dealer can help.



Here are a few findings from our studies using Field Green® over the years:

- Grass hay yields can increase as much as 1.5 to 2 tons per acre.
- Protein in grass hay can increase 26 percent and the overall feed value 10 percent.
- Alfalfa yields can go up at least a ton an acre when supplemented with potassium.

Inside

Better alfalfa that lasts longer,
page 2

Fertilizing grass hay,
page 3

Contacting Field Green® staff,
back page



The field above was the site of a multi-year field trial to test the effectiveness of biosolids on alfalfa stands. The strips of crops in this aerial photo show the differences between using biosolids with and without potassium.

Field Green® biosolids will give you more alfalfa and you'll get more years out of the stand, if you use it right.

The key to using it right? Add potassium.

Even though alfalfa, as a legume, can make its own nitrogen, it will grow better with proper fertilizing.

A long-term field study using biosolids found that the key

to boosting yields is potassium in addition to biosolids.

In the second year alone, alfalfa with the complete fertilizer mix yielded about a ton more per acre than alfalfa fertilized just with biosolids or not fertilized. Potassium also helps a legume stand, like alfalfa, last longer.

Biosolids, like Field Green®, offer three benefits.

Biosolids supply nitrogen, phosphorus and organic matter. Nitrogen and phosphorus are two of the key ingredients in fertilizer. Organic matter helps build soil and make it healthier.

Biosolids don't contain much potassium and should be supplemented with a commercial fertilizer. Byproducts can also provide some of the potassium a crop needs.



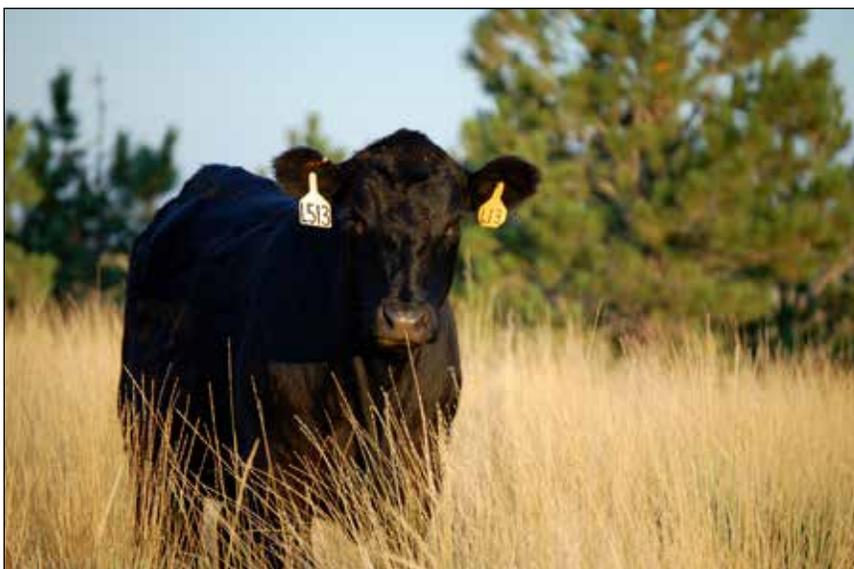
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WLSSD's Field Green program has worked with several organizations to study the impact of biosolids on crops, and to determine best practices to use biosolids.

If you're interested in results of the studies or have questions, contact Craig Lincoln of WLSSD at:

(218) 740-4808 or
craig.lincoln@wlssd.com



Fertilizers pay for themselves on hay

Fertilizing will get you better hay and more bales on fewer acres.

That's one of the conclusions from a field trial testing the use of fertilizer on the clay soil of Douglas County.

The trial, conducted summer 2018, weighed the benefits of fertilizing grass against the likely costs of fertilizer.

In the study, plots were marked out on a field, fertilizer (and biosolids) were applied at carefully measured rates, and grass was cut in precisely measured squares to test for yield and quality.

Results found that management matters.

Two or more cuttings

Although many farmers traditionally cut one crop off grass hay fields late in the summer, using a good fertilizer mix with two or more cuttings would pay off.

The field would yield more hay and that hay would be higher quality.

"Producers could also improve their harvest management to increase forage yield and quality, which would likely reduce the amount of acres a grower would need to manage," according to Richard Wolkowski, Ph.D., of Alfisol Soil Management LLC, who conducted the field trials.

Fertilizer pays off

That means a farmer would need fewer acres to get the same results.

Or, if there's a market for the hay, the farmer can sell more hay at a higher price.

In other words, it means investing some money in fertilizer would pay off, especially with two cuttings.

Wolkowski is a retired soil scientist with the University of Wisconsin Extension.

For more information:
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 (218) 740-4808

You have choices if you want more hay from the same acreage. Recent stories in the Biosolids Digest have covered these options:

- Wrapping wet hay gives you the chance to harvest hay with moisture contents between 20 to 75 percent. It also reduces leaf shatter, which alone can increase yield 7 to 15 percent. If harvesting wet hay results in three cuttings, yield can go up about one ton per acre and hay quality can increase 12-18 percent.
- Grazing the first cutting of hay, when the weather is wettest and least predictable. This practice can increase total yield by about one-half ton over two cuttings.

For information, contact Craig Lincoln (see box, left)



Field Green® program
Western Lake Superior Sanitary District
2626 Courtland Street

Clear Answers for Clean Water®

Contact us

Have a question or want information on Field Green® biosolids?
Here is a guide to our staff members:

If you are an existing customer and would like to schedule a field or have questions on a recent application, contact:

*Paul Wilken, Lead Land Application Operator,
(218) 740-4764 or paul.wilken@wlssd.com*

If you're interested in enrolling a field in the biosolids program, have general questions, are a member of the public or are a government official, contact:

*Craig Lincoln, Environmental Programs Coordinator,
(218) 740-4808 or craig.lincoln@wlssd.com*

For general questions, contact:

*Todd MacMillan, Biosolids Supervisor,
(218) 740-4767 or todd.macmillan@wlssd.com*



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