



# Management Solutions



Agronomic Solutions, LLC

Fall 2013 Issue

## Soil Sampling ...

### What sampling program works best for your farm?

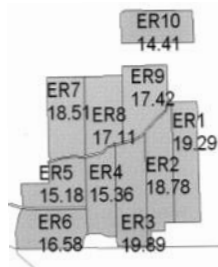
It is time to start making plans for your fall soil testing. It may be wise to seriously consider pulling two (2) types of Soil Samples, one for you the farmer to use for making fertilizer recommendations, the other to satisfy government regulations.

The best sampling method to help improve the overall production of your fields is Grid Sampling. To make decisions agronomically, Grid Sampling is an efficient method and would be best suited for your farming operation. With Grid Sampling we can offer you more complete recommendations and site specific fertilizer rates.

With government regulations, we want you to be able to stay in compliance as well as have the most efficient and productive fields. In order to do this, you may need to start double sampling. The Grid Sampling would give you the information for the best placement of nutrients for your fields and Field Sampling would satisfy the government regulations without exposing your spotty high phosphorus levels. When you turn in the soil test data to the state, if you have one area too high in Phosphorus, you can no longer spread manure in that area. By using the Field Sampling method you will have pages to turn in with more averaged data. This helps to keep your manure spreading options as wide open as possible.

#### By Field

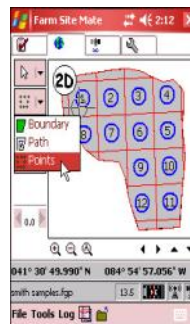
Sample areas <20A



Make sure that your samples are pulled according to University recommendations. Field Sampling should be done with no field area over 20 acres. **By following state recommendations and keeping the samples under 20 acres, you can pull the samples deeper. This will also help with your phosphorus levels, just be consistent throughout your fields.** Remember that this will dilute or lower your potassium and pH levels too, so it's not good agronomic data. Call me if you need further advise.

#### Grid

Sample every 2.5A grid on the field



This is a seasonal publication produced by Agronomic Solutions, LLC for the confined feeding operators. Issues and information addressed in the newsletter will be geared towards animal feeding operation owners and managers. Hopefully you will find its contents useful in your operations. (260) 593-2092

## Fall To Do Checklist ...

Fall is a busy time of year with a lot of work to get done. Here is a quick reminder checklist to make sure everything gets done.

- Safely harvest crops
- Clean out and inspect manure storages
- Collect manure samples for analysis
- Spread manure at agronomic rates
- Calibrate manure spreaders
- Soil sample land application fields
- Spread cover crops on liquid surface applied fields
- Update manure spreading & operating records
- Sign up for NRCS EQIP contracts

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## Value of Manure Current Book Values ...

The charts below show the average manure value per acre.

### Current Fertilizer Prices

28% Semi- prepay	560# N/ton	\$314.00/ ton	\$0.561/ # N
10-46-0	920# P <sub>2</sub> O <sub>5</sub> /ton	\$535.00 / ton	\$ 0.582/ # P <sub>2</sub> O <sub>5</sub>
0-0-60 Semi	1200# K <sub>2</sub> O/ton	\$474.00 / ton	\$0.395/ # K <sub>2</sub> O

Swine Grower Pit			Dairy Lagoon		
N	33	\$18.51	N	2.1	\$1.18
P	33	\$19.21	P	9	\$5.24
K	27	\$10.67	K	9.3	\$3.67
	Per 1000 gal	<b>\$48.39</b>		Per 1000 gal	<b>\$10.09</b>

4000 gal/A = \$193.56/acre

12,000 gal/ A = \$121.08/acre

Beef – Manure Pack			Litter - Broilers		
N	5.3	\$2.97	N	23.4	\$13.13
P	5.0	\$2.91	P	30.9	\$17.98
K	7.6	\$3.00	K	24.3	\$9.60
	Per ton	<b>\$8.88</b>		Per ton	<b>\$40.71</b>

25 ton/A = \$222.00/acre

5.0 ton/A = \$203.55/acre

...now worth an average \$185.05/ acre

*Renewals for your Category 14 will be coming in the mail soon.*

Do not over-look that mailing. If you spread manure, you are required to renew your Category 14.

### Category 14 update

There will be plenty of opportunities to get points and take the exam this winter and next spring. Keep watching for details in the next edition of our newsletter.

### Requirements for maintaining a Category 14:

- 3 continuing Credit Hours (CCH's) over a 5 year period
- A certified applicator may obtain no more than half the number of required CCH's at any single program

*If you have an IDEM Permit you cannot winter time spread.*

### Staging Restrictions that apply to EVERYONE:

- Stage 300' away from surface water, water well, drainage inlets
- Cannot stage in a waterway, floodway or standing water
- Cover, or berm, pile after 72 hours
- Stage 100' from property line or public road
- Stage 400' from residential buildings
- Do not stage on an area of greater than 6% slope
- Do not stage on the side of a hill
- **Apply to field within 90 days**



## Monty's Liquid Carbon... Better Soils! Better Crops!

Improve your soil this fall to maximize your yield next season with Monty's Liquid Carbon soil conditioner:

- Tank mix to apply with fall herbicide applications
- Apply at burn down prior to wheat planting
- Makes for easier, more successful planting next spring
- Take control of your weeds and residue breakdown now
- A solution for managing residue at fall harvest



Today's farmers have corn stalks that have been in their fields for more than three years. The unusually tough corn stalks have difficulty being cut through by planter units, which causes stalks to pile up in front of the coulters during planting, resulting in poor planting depth, poor germination, poor seed drop, time delays and much more.



Many issues outlined above can be avoided if the corn residue is treated in the fall so it becomes more easily broken down by spring planting. **Monty's Plant Food** has been helping farmers the past several years with the decomposition of corn stalks and other residues by combining its fall residue management program with any application of fall herbicides after harvest or by itself.

**The program consists of applying one half gallon of Monty's Liquid Carbon, plus one quart of Monty's Agri-Sweet (many farmers also add three gallons of liquid UAN). The program provides a solution to the decomposition of corn stalks by infiltrating the corn stalk residue, causing it to deteriorate much faster so that a planter unit easily shreds through it in the spring.**

Farmers who have been using Monty's fall residue management program over the past four years have seen tremendous benefits when planting in the spring, including increased soil temperature, increased germination and efficiency, corn stalks shattering and more even planter depth, just to name a few.

## Plan BEFORE You Spread Manure ...

Preplanning and record keeping are vital when spreading manure in today's world. There are a number of things that must not be overlooked:

- **Manure Sampling**

Are you staying on top of the manure sampling that is required for the various plans? I find that this is an area where the majority of the producers I work with struggle. If you have an EQIP 633, a CFO, or a CAFO *you are required to have an annual manure sample*.

According to the Indiana regulations for CFOs and for CAFOs you are required to have annual sampling in ALL storages. That means you must pull a sample from each storage EVERY year.

### STEPS TO TAKE WHEN PULLING MANURE SAMPLES

1. Pull the manure samples
2. Freeze the samples and keep frozen
3. Call me to get my lab ID so you can turn it in — or call me and I will stop by, pick them up, and get them to the lab for you. However you choose to get the samples to the lab is OK — **JUST DO IT!** And then ... make sure I get the results.

- **Have current Soil Tests—know p levels**
- **Make sure you are spreading the correct agronomic rates**
- **Stay within the proper setbacks**
- **Have the proper licenses—Category 14**
- **Record your weather data (CAFO)**
- **Calibrate your spreader**
- **Call us if you have any questions!**

## Improve Manure Efficiency ...

Consider using a **nutrient management product**. A New York producer stated, “I feel like, for every dollar invested in the fertilizer enhancer, I’m getting two dollars back. We’ve seen yield increases ranging from five to 10 bushels per acre in corn where the treatment has been used.” This producer either applies the product directly to manure lagoons, or he streams it over the manure during application with a dual-disk injector.

They were seeing very good response with their phosphorus. Another benefit is a significant reduction in ammonia levels, both in the dairy herd confinement areas and in fields treated with manure. “We inject the manure and cover it up in one pass. I estimate we’ve had an 80 to 90 percent reduction in ammonia odor when using the product. Our neighbors have come up to us and asked when we were going to spread manure on our fields, but we had already done so a week or two previously.”

Benefits from using manure nutrient manager in lagoons and pits include reduced foaming when pumping manure into tanker trucks and the ability to haul more manure per truckload. Producers are getting a better clean-out of pits and lagoons and a more consistent manure mix in terms of pumping characteristics and nutrient distribution.

Corn yield has been reported as increasing by 15 to 20 bushels per acre.

For more information, refer to the Sept./Oct issue of Manure Manager at [www.manuremanager.com](http://www.manuremanager.com).

## “End of Season”

### Cornstalk Test ...

The cornstalk nitrate test (CSNT) is recommended as an end-of-season assessment of an N management program. Fifteen or more 8-inch stalk segments (beginning 6 inches above soil surface) are taken from representative areas of a field within a few weeks after blacklayer and analyzed for nitrate-nitrogen (NO<sub>3</sub>-N). Corn plants with excess N for maximum yields accumulate nitrate in their lower stalks at the end of the season.

A&L Great Lakes Labs divides stalk N concentration into four categories (*see fact sheet on A&L’s website*):

**Low:** Less than 450 ppm nitrate-N (Purdue), less than 250 ppm (ISU) indicates high probability that greater availability of N would have resulted in higher yields. *Visual signs of N deficiency are usually observed in this range.*

**Marginal:** 250 - 700 ppm nitrate-N (ISU) N availability was close to the minimum amount needed for maximum yields but should not be the target for good nitrogen management.

**Optimal:** 450-2000 ppm nitrate-N (Purdue), 700-2000 ppm nitrate-N (ISU) indicates that N supplies were sufficient for maximum yields.

*Note: The high end of this category is appropriate when N costs are low and corn prices high. The low end is appropriate when N costs are high and corn prices low.*

**Excess:** Greater than 2000 ppm nitrate-N indicates that N supplies were above levels needed to maximize profits.

The concentration of nitrate in the stalk at the end of the season reflects all factors that influenced N availability and N needs during the growing season. High rainfall seasons will likely result in lower concentrations; low rainfall seasons result in higher concentrations.

Multiple seasons of CSNT evaluation are warranted before altering an N management program because the optimum N rate varies from season to season. The evaluation of a N management system with the CSNT on any given field in a single season is interesting, but not particularly useful in making management decisions for future years. Unfortunately, there is no concrete guidance on how many years the CSNT should be conducted, but it is suggested that three or more seasons would be reasonable.

Place  
Stamp  
Here

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# Newsletter

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## Soil Sampling Reminder

A good soil sampling program is the basic building block for your entire farming operation.

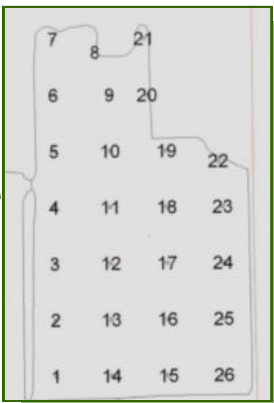
- ◆ Are your soil samples 2—3 years old?
- ◆ Do they represent areas greater than 20 A?

*If you answered “yes” to either of these questions, you should have new samples pulled this fall!*

***Please contact us today to get on the fall sampling schedule.***

**Consider intensively sampling your fields.**

**Grid**  
Sample every 2.5 A grid on the field



Samples may be taken either in the fall or spring. **Fall sampling ensures the test results are ready in plenty of time for spring or for fall fertilization** when weather usually is good and time not so critical.

Sign up for NRCS’s EQIP 590 High Management cost share to cover 100% of expenses plus leave \$\$ in your pocket.

### Dates to Remember ...

*We will exhibit at the following Farm Shows. Come and see us!*

- Dec. 19—21: 2013 Midwest Farm Expo & Auction**  
location: Michiana Event Center Howe, IN
- Jan. 14, 15, 16: 2014 Fort Wayne Farm Show**  
location: Allen Co. War Memorial Coliseum, Ft. Wayne, IN
- Feb. 7—8: Northern Indiana Grazing Conference**  
location: Michiana Event Center Howe, IN

**Other Dates:**  
Dec. 15: Michigan CAFO deadline to prove 6 months storage