Fall Edition

Management Solutions

Agronomic Solutions, LLC

Fall 2009 Issue

AWEP (NRCS) Cost Share comes to our area…

USDA ANNOUNCES $58 MILLION TO IMPROVE WATER QUALITY AND QUANTITY IN AGRICULTURAL PRODUCTION

The NRCS has established the Agricultural Water Enhancement Program (AWEP) to promote ground and surface water conservation and improve water quality by helping farmers implement agricultural water enhancement activities. This is in effect only in certain areas throughout the country. One of those areas given an allotment of money ($554,000 per year) is the St. Joe Watershed District which includes counties in **Northern Indiana** (St. Joseph, Elkhart, LaGrange, Steuben, Kosciusko, Noble and DeKalb) and **Southern Michigan** (Hillsdale, St. Joseph, Cass, Berrien, Van Buren, Kalamazoo, Calhoun and Allegan).

The funding is available and everyone who applies and meets the same qualifications as for EQIP will be accepted until the money runs out.

Eligible practices to receive AWEP funds in Indiana include:

- no-till
- nutrient and pest management
- cover crops
- filter strips
- grassed waterways
- irrigation water management
- pasture and hay planting
- watering facility

Eligible practices in Michigan include most of the above plus:

- CNMP's
- Agrichemical Handling Facility
- Waste Storage Facility
- Composting Facility

Cost Share AWEP vs. EQIP: (in Indiana)

- Cover Crops pay $46 – EQIP pays $30
- Nutrient Management (599) pays $6 – EQIP $4
- High Management (590) $22 – EQIP $15.

The advantage of applying for AWEP is that it pays out for the cost share at a higher rate than EQIP.

Other practices worth taking advantage of are:

- Pest Management (595) pays $15 per acre
- Irrigation Water Management pays $12
- Irrigation System upgrade has a payment cap of $11,250

If you are thinking of implementing any of these practices,

NOW IS THE TIME! **Apply ASAP for these $$**

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. (574) 202-2608

Inside this issue:

"Turtle" Corn Season… Good News… Bad News…

Good news: most of the Midwest's late-planted corn crop escaped serious heat or drought stress during the critical pollination period and much of the important grain-filling period. ***Bad news:*** the unusually cool 2009 growing season continues to put the brakes on the development of the crop. This is according to Purdue U. corn specialist, Bob Nielsen.

According to the USDA crop progress report, the majority of Indiana's crop lags nearly 3 weeks behind the 5-year average progress. If the current rate of crop progress continues for the remainder of the season, quite a bit of the state's crop will mature in October rather than September.

The years 1992, 2002 and 2008 bare similarities to this year's growing season. Though crop progress in those three growing seasons were similarly delayed, the end result for grain yields varied dramatically. Nielson believes the 2009 growing season is more similar to the 1992 and 2008 growing seasons than to the disastrous 2002 growing season. "Drought stress accompanied the delayed crop development in 2002 and contributed strongly to the large decrease from trend yield that year." Indiana's corn crop has not experienced such widespread drought stress in 2009. The USDA-NASS believes that yields will be good this year. Their first yield estimate released Aug. 12 pegs Indiana's 2009 corn crop at 163 bushels per acre, or 5.6% above trend yield.

Purdue research from 1992 offers a hint of what to expect on the calendar timing of kernel black layer formation relative to the silking date. Where silking occurred toward late July, kernel black layer formation occurred by Sept. 21. Where silking occurred in early August, kernel black layer occurred by Oct. 11. Where silking occurred about mid-August, kernel black layer formation occurred by Oct. 27, but occurred 10 to 14 days after a killing freeze event. Given the similarities between 1992 and 2009, Nielsen suggests that these data represent something of a crystal ball for corn growers to gaze into for this year's crop.

Regarding a fall freeze risk to this year's crop, Nielsen says that USDA-NASS estimated that 76% of Indiana's corn crop had silked by Aug. 2. Previous Purdue research suggests that most of that should black layer no later than early October. Another 13% of the crop had silked by Aug. 9 and that may black layer by approximately Oct. 11. Much of the remainder of the state's crop (8% to 11%) had silked by Aug. 16 or later. That portion of the crop may not mature until late October to early November and will likely experience a killing fall freeze prior to normal kernel black layer formation.

"Assuming that the tail end of this year's crop will at least make it to the half-milkline stage prior to a killing freeze, the potential yield loss for an individual field due to premature plant death would be no more than 12%," Nielsen says.

Did You Make the Right Nitrogen Decisions This Year?

The Late Season Cornstalk Nitrate Test has been demonstrated to be a reliable end—of—season indicator of crop N status. It provides a good assessment of whether the crop had the right amount of N, too much N, or whether it ran out of gas. This information combined with records of N management can be very useful for making and fine tuning future N and manure management decisions.

For the test results to be valid the sampling instructions must be followed carefully. Samples for this test should be taken between ¼ milk line and up to 3 weeks after black layer. An 8–inch long section of corn stalk starting 6 inches above the ground is collected from at least 10 representative plants in a field.

Research has shown that samples could be taken up to 24 hours following silage harvest. For this to work the corn must be chopped at least 14 inches high so that you can still get the correct sample ie. 8–inch long sections of corn stalk starting 6 inches above the ground. Some farmers will raise the chopper head occasionally to leave some taller stubble to facilitate sampling later. Don't delay any longer and, in general, be careful if there is any stalk deterioration.

If the results of the test fall between 700 and 2000 ppm N, this indicates that the N management was optimum. Below this range the crop likely ran out of N and did not achieve full yield potential and results above this range indicate that the crop had more than enough N which could represent an economic loss from purchasing unnecessary fertilizer N or wasted manure N and it could result in increased potential for loss of N to the environment.

Contact me if you have questions and /or if you are interested in doing the Late Season Cornstalk Nitrate Test.

Predicting Corn Silage…

One of the more difficult management decisions when producing corn silage is properly timing harvest. Corn silage that is too wet will yield less, result in silo seepage and produce a sour tasting silage resulting in lower intake by livestock. If corn silage is too dry then yield is often reduced, heat damage and mold more easily develops in the silo because fermentation is inadequate, and the silage has lower protein, digestibility and the vitamins A and E.

Traditionally, most farmers would begin chopping silage around Sept. 15.

With high feed costs and low milk prices, maximizing the nutritional quality of corn silage and minimizing shrink are more important than ever. At this time in the growing cycle, the most important manageable factor that will influence the nutritional value of this year's corn silage is maturity at chopping. Harvesting corn silage too early (i.e., with less than 30% dry matter) usually results in a lower starch concentration in the silage, which means more corn grain may need to be supplemented.

- ✓ Maximize nutritional value of corn silage by chopping when corn is between 30 and 38% dry matter.
- ✓ Minimize shrink by chopping fine enough (but not too fine), filling rapidly, packing well and sealing the silo with plastic.

Blunt Ear Syndrome...

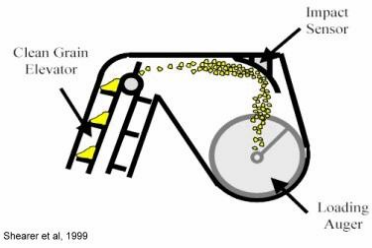
The frequency of Blunt Ear Syndrome has increased in the Midwest since 1992. The cause is uncertain but appears to be the effects of a cold temperature shock during ear size determination that either directly injures ear shoot tissue or alters the hormonal balance within the developing ear shoot.

If you come across fields that exhibit these BES symptoms, please consider submitting some background information on those fields to an on-line database that may eventually help identify common threads among affected fields. The information needed and the on-line database form is located at *http://www.zoomerang.com/Survey/?p=WEB22864Y5G52Y*.

Yield Monitor Calibration: Garbage In… Garbage Out…

Yield monitor accuracy can be excellent, within 1% of the actual grain weight measured with a weigh wagon or farm scales... if well-calibrated. Conversely, yield estimates can be very poor if monitors are not well-calibrated. The error in accuracy can be 100% if the yield monitor is taken "off the shelf" and put into service without any calibration. Errors in accuracy can easily range as high as 7 to 10% late in harvest season if the monitor was calibrated only at the beginning of the harvest season.

Calibrating a yield monitor simply requires the harvest of individual "loads" of grain that represent a range of grain flow rates (i.e., a range of yield levels) expected in the field(s) to be harvested. The amount of grain required for each calibration "load" ranges from 3,000 to 6,000 lbs (50 to 100 bu. grain) depending on the manufacturer's recommendations for the specific model/make of yield monitor. The grain weight of each "load" is estimated by the monitor as the grain is harvested. The grain for that specific "load" is then offloaded from the combine hopper and weighed on weigh wagon or commercial scales. The actual weight is then entered into the yield monitor console and the yield monitor firmware makes adjustments to curve.



Some manufacturers suggest that only one grain load is necessary to perform an accurate calibration. Other manufacturers recommend between 3 and 6 loads to perform a satisfactory calibration of the yield monitor to best "train" the monitor how to interpret the flow sensor signals.

The goal is to "capture" the full range of grain flow rates (aka yield levels) you expect to encounter during the harvest of your fields. Capturing a range of grain flow rates can be a nuisance because it typically requires harvesting individual full header width "loads" at different speeds or partial header width "loads" at a constant speed. This headache plus the time it takes to off-load and weigh the individual grain loads are among the most common reasons why growers do not faithfully calibrate their yield monitors.

Yield data can be very useful for identifying and diagnosing yield influencing factors in corn or soybean. Yield monitors can also be useful for harvesting on-farm research trials. Yield monitor calibration, yield data processing, and yield data "cleaning" are necessary to ensure accurate yield data. Remember the old adage: "Garbage in….Garbage out". Accurate yield maps will not only help you identify the easy to change things in the field like tillage and drainage, they can also be used to develop VRT fertilizer and variable rate seeding application maps. Some areas of your fields may not be capable of producing higher yields. By developing application maps based on yield maps, you are able to save money on input costs.

Bottom Line… Step one: READ THE MANUAL Step two: DO WHAT IT SAYS

Step three: USE THE INFORMATION YOU HAVE COLLECTED TO IMPROVE PRODUCTION

CAFO Change Is Coming…

Attention Michigan CAFOs! Change is in the air! The original general NPDES permit for the state is expiring Apr 1, 2010, therefore the state is in the process of drafting the new one. They are at a point of creating a new CAFO draft permit, which should be coming out for public comment soon.

CAFOs need to be re-apply for coverage 6 months before permit expires, Apr 1, ***so it needs to be done by Oct 1.*** You still have to reapply for coverage under the old permit. You should have received a letter from DEQ with the simple one page form. ***Please make sure that you fill it out and return it with the $75 fee before Oct 1.*** If you need help with this or have questions please let me know.

Drafting new permit: proposed changes

- *New fields will have to be public noticed* – so you will have to wait at least 2 weeks after you turn the information into DEQ to be able to spread on it. You will still have to submit maps, landuse agreements, and soil test information prior to being able to spread.
- *Manifesting manure* – anyone given manure from a CAFO will have to get a groundwater permit to be able to spread it. It should be similar to the land applications portion of the current permit. This is coming in response to large operations creating separate entities to haul their manure to reduce the amount of record keeping. If this rule passes, it will make it more difficult to give your manure away even if you were doing it the correct way to begin with.
- *Spreading rates* – Going to more of a chart system based on crop removal P – will mean that low P level fields will only get lower rates, no applying at N levels if low. You will have to apply manure on more acres at lower rates.

All of this is still under development and may change.

Be looking for the proposed rule to go up for public notice soon.

All current permit holders need to re-apply for permit coverage by Oct 1.

Reminder: sites and buildings have to be inspected and up to NRCS 313 standards next year. The engineers will have to inspect the pits completely empty. This will take time and coordination. I am currently working on putting together a list of qualified engineers to make this happen. If you have multiple buildings, you should start planning for these inspections THIS FALL so that all of your pits don't have to be empty at the same time.

Please contact me with any questions,

Animal Rights Bill...

The **Michigan House** has voted to require farms to comply with rules phased in over the next decade against confining and tethering some animals.

The measure would apply to pregnant pigs, veal calves and egg-laying hens. The rules would have exceptions but in most cases would allow the animals enough room to at least turn around freely.

Attention Indiana CFO's & CAFO's! Change is coming in Indiana also, we just don't have the dates or the specifics yet. IDEM is working now to develop new rules for the state to adopt. It is looking like the CAFO's currently with an NPDES permit and no discharges will be able to exit that permit program, but they will still be expected to maintain the same management level and follow the similar rules that are being developed. The CFO's in state will probably be looking at some new rules to follow and more guidelines for manure spreading rates. As these rules become drafted, there will be public comment periods that I will keep you informed about as they happen. They are probably two months away from having anything formally drafted about which they can will take comment. I'll do my best to keep you informed as I receive information that affects your operations.

Melissa is working on her Masters Degree. She is beginning her Research Project and needs farmers who will volunteer to allow their farming practices to be part of her research. She is currently looking for farmers who are interested in one of the following practices: grid sampling, VRT application, or have a yield monitor.

Call ASAP to be included in this research project**.** **574-202-2608**

New Manure Spreading Forms…

Are you using the new Manure Spreading Forms?

The new forms are required for CAFO's and everyone really should be using them. They have a section to record manure spreading information such as:

WEATHER: You must record the weather information *before*, *during* and the *day after* a manure application.

INSPECTING SPREAD EQUIPMENT: Is everything in proper working order and calibrated correctly? Check it and then document it.

TILES FLOWING: Very important to indicate where the tiles are flowing and if there is and odor or a color change.

Don't put yourself in jeopardy with IDEM/DEQ. You should have all the correct paperwork and you need to be using it. I really can't emphasize this enough. ***"Just Do It!"***

Call me if you do not have the Manure Spreading Forms and I will see to it that you get them immediately. A sample form is up on the website: www.agronomicsolutionsllc.com

Now Is the Time to Take Action!…Seeding Cover Crops...

If you are interested in trying out cover crops in your farming operation, hopefully you have planned ahead and signed up for cost share and had your seed aerial applied. If this is not you, it's still not too late to try this year. We are blessed with being late in just about everything this year, so that gives time to try some of the crops. The door is quickly closing however for oats and annual ryegrass. Oats is an easy cover crop to work with because it requires no work in the spring since it winter kills. Annual ryegrass has great rooting possibilities, but needs to be seeded earlier to get time for good root development. Cereal rye is an old faithful cover crop that can be easily applied with a dry spreader, as late as the end of October in most years and is tough enough to even grow on concrete in the cracks. This cover crop can get you the soil protection and nutrient recycling that most producers are striving for.

A combine harvests soybeans in a field where an aerial seeded annual rye cover crop is already growing. Aerial seeding provides a longer growing season for the cover crop and should be done before leaf drop of the soybeans. The leaves provide a mulch to help hold moisture for the germinating seeds. Aerial seeding works best in wet falls or under irrigation.

So it's not too late! Sign up for AWEP cost share for next year. It pays $62/A in MI and $46/A in IN.

Soil Sampling…

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 acres?**

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

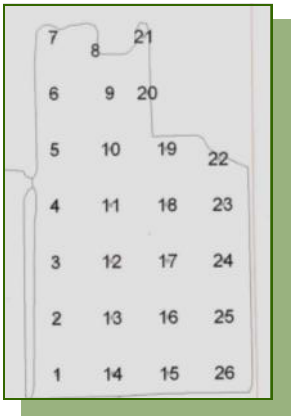
Combat high fertilizer prices with a good soil sampling program with unbiased fertilizer recommendations.

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

Consider intensively sampling your fields.

Grid

Sample every 2.5A grid on the field



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

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Manure In The News

Manure Causes Ventura Co. Fire

FILLMORE, CA -- The Ventura Co. Sheriff's Dept. said a 1,500-acre wildfire threatening homes started through "manure spontaneous combustion from a local ranch."

Officials did not disclose exactly where the fire started but spontaneous manure fires are fairly common in farm communities, often occurring during conditions of extreme heat. Temperatures around this fire topped 100 degrees.

In 2005, it took months to fully contain a manure fire that broke out at a feed lot near Lincoln, Neb. A man was killed earlier this year in Texas in a fire later blamed in part on animal waste placed in bags in a truck.

More than 300 firefighters were on the scene, trying to prevent the blaze from hitting subdivisions in Moorpark. Evacuations have been ordered. Officials said numerous structures are threatened, as well as power lines and agricultural areas.

Manure Dispute Leads to Tazering

HURON TOWNSHIP, MI -- A Saturday morning feud between neighbors over the placement of manure led to shots fired, a Tasered man and an arrest. Huron County sheriff's deputies said Casey and Tina Jahn had a gun pointed at them by a neighbor as they spread lime and manure on their farm about 9:30 a.m.

The disagreement over the placement of the manure and lime had been ongoing, police said. They said the 45-year-old suspect began firing his shotgun and when they came near the fence line in their tractor he aimed it at them.

They said they confronted the neighbor and attempted to arrest him for felonious assault. He was "uncooperative" and deputies used a Taser to complete their arrest.

Main Street Manure Spill Creates Stink

PRINCE EDWARD IS. -- A dump truck carrying manure from a lagoon had a major spill on the main street of O'Leary, P.E.I. Members of the fire dept. were called to help.

"The tailgate unlocked from what we can figure. It come around the corner and the gate let go, and from there they just left a trail," said fire Chief Ron Phillips. "It was probably about three inches thick on one side of the road. The owner of the company responsible for the spill come with his heavy equipment and cleaned the street to the pavement. And then we came in and flushed the remnants into the sewer system."

Phillips said the streets of O'Leary were smelling much better Monday morning.

Planning Calendar...

Agronomic Solutions is in the process of updating our records. Would you please send us your cell phone number and e-mail address ASAP. We want to be able to communicate as quickly as possible when things arise.

- Have a Safe and Abundant Harvest
- Michigan: Watch for the Public Comment
- Plan Fall manure Spreading
- Soil Sampling—if needed
- Indiana: Watch for Public Comment
- Let's meet and update your records.