

February – April Edition



Management Solutions



Agronomic Solutions, LLC

Spring 2016 Issue

Thank You

We want to thank all of you who have come to the office in this past year. Not having to go to all of your farms has helped us tremendously.

UPDATE ON MELISSA'S DAD

We began asking you to come when Melissa's dad was diagnosed with cancer a little over a year ago, because her schedule was so uncertain. Her dad, Bob Tyson, has experienced being cancer free for a number of months, but last week his doctors found that the cancer is back. So again, Melissa will be taking him to doctors' visits and chemo treatments and her schedule will be unpredictable.

We are asking that you continue to come to the office whenever possible to meet with us. I want to remind you that we have consultants who are able to help with your questions and complete the work that is in process for your operation. Try to call the office instead of Melissa's cell phone. If she is not in the office and we need her assistance, we will be able to reach her and get back to you. Please feel free to continue to email her.

Thank you for your understanding and support through this time. ***Please pray with us for Bob and for the whole family.*** As many of you know these can be stress filled times.

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

Spring To Do Checklist ...

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

- Get updated soil samples to us
- Clean out and inspect manure storages
- Collect manure samples for analysis
- Calibrate manure spreaders
- Spread manure/fertilizer at agronomic rates
- Update manure spreading & operating records
- Complete spring tillage
- Inspect / calibrate planter and drill
- Accurately & carefully plant your crops
- Scout fields for emergence
- Replant only if necessary
- Don't forget to 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—Feb. 9, 2016

28% Semi- prepay	560# N / ton	\$239 / ton	\$0.427 / # N
11-52-0	1040# P ₂ O ₅ / ton	\$475 / ton	\$0.457 / # P ₂ O ₅
0-0-60 Semi	1200# K ₂ O / ton	\$305 / ton	\$0.254 / # K ₂ O

Swine Grower Pit			Dairy Lagoon		
N	33	\$14.09	N	2.1	\$0.90
P	33	\$15.08	P	9	\$4.11
K	27	\$6.86	K	9.3	\$2.36
	Per 1000 gal	\$36.03		Per 1000 gal	\$7.37

4000 gal / A = \$144.12 / acre

12,000 gal / A = \$88.44 / acre

Beef – Manure Pack			Litter - Broilers		
N	5.3	\$2.26	N	23.4	\$9.99
P	5.0	\$2.29	P	30.9	\$14.12
K	7.6	\$1.93	K	24.3	\$6.17
	Per ton	\$6.48		Per ton	\$30.28

25 ton / A = \$162.00 / acre

5.0 ton / A = \$151.40 / acre

Duck—Liquid		
N	17.6	\$7.52
P	25.9	\$11.84
K	19.3	\$4.90
	Per 1000 gal	\$24.26

5,000 gal / A = \$121.30 / acre

...now worth an
average of
\$133.45 / acre

Manure Management ...

After smelling a chicken manure pile for about two months, a couple in Hagerstown, IN, complained to their commissioner who contacted the Office of Indiana State Chemist (OISC). IDEM and OISC are required to investigate when a complaint is made.

OISC found that the farmer had hauled the manure from Ohio to Indiana on Feb. 27 and constructed a berm around it on Mar. 8. The person he hired was reportedly unable to apply it because of bad weather. The farmer was fined \$100 for transporting manure from Ohio to Indiana without a license and issued a warning for failing to cover the manure with a tarp and failing to create a berm within 72 hours of dumping it.

Dozens of Indiana farmers, haulers, applicators and distributors were warned or fined last year by OISC for violating the state's commercial fertilizer law. OISC received 114 fertilizer complaints last year, up from 73 the year before.

Many violations involved tons of poultry manure piles left uncovered and without any tarps or berms to prevent runoff in wet weather. Violations included allowing beetles to escape from large piles onto a neighbor's house, applying manure to frozen/snow-covered ground near a waterway, and discharging manure into a woods.

People and organizations like Barbara Sha Cox of Indiana CAFO Watch are looking for manure violations. Another watch dog group is NoCAFOs.org. It is imperative that you know the rules for managing your manure, keep your records up to date, and *follow the rules*. Also make sure you have a Cat. 14 if you spread.

Good Neighbor Relations ...

Land development is increasingly bringing residential development and non-farmers into agricultural areas. At times new residents have little previous exposure to farming. They may have misconceptions about what activities occur on farms and in rural areas.

Getting to know your neighbors, especially if some of them are new to your community, can be one of the most important activities you do to help your farm survive in this changing environment. When you know your neighbors, it is easier to talk to them when problems occur and to keep problems from escalating into blame, misunderstandings, hard feelings, or intense community conflict. Knowing your neighbors makes it more likely that when they have a concern about your farm operation (such as noise or odor), they will call you directly to work it out instead of reporting you to a government agency.

If you expect your neighbors to be good neighbors, you must also be a good neighbor to them. Being neighborly means being friendly to your neighbors, helping them when needed, and being willing to accommodate them. Simply using common sense can make a big difference in minimizing conflicts. The timeliness of farming means that sometimes you do not have much choice about when you plow, spray, or harvest. Often, however, you do have some control over when you do farm tasks. Talking to them (even though that takes time) and explaining what's going on instead of just doing it can avoid a lot of grief. Try to appreciate if they are having a picnic or something. Don't spray or plow near them. Some things can be put off for a day.

The appearance of your farm plays an important role in determining what people think about you and your farm operation. Non-farmers too easily can believe the farm's appearance is a reflection of the farmer's professionalism, competence, and concern about controlling problems. A farm that is known as a neighborhood eyesore will have less goodwill in the community and get less public sympathy if problems arise.

How you respond to complaints or concerns expressed by neighbors will often determine whether the issue grows into anger, resentment, and major conflict. Farmers who have established friendly relationships with their neighbors will find it easier to avoid such conflict. Respond promptly and genuinely to complaints by communicating directly with your neighbors.

The bottom line is COMMUNICATION! Friendliness and attitude cannot be over-stressed. Do unto others what you would have them do to you!



BioSecurity ... Bird Flu

In the summer of 2015, bird flu cost the U.S. poultry industry an estimated \$3.3 billion as farmers had to destroy infected flocks and halt production for months. So when bird flu was found on a turkey farm in Southern Indiana this winter the U.S. farm and health officials were racing to assess the threat that a type of bird flu never before seen in this country could pose to humans and poultry. They immediately employed emergency plans drawn up in the wake of the devastating outbreak last year.

After confirmation that the virus had hit an Indiana turkey farm, the federal government sprang into action overnight alerting other states to the danger and putting workers who might have been exposed to the virus under surveillance.

Testing showed that the flu which quickly spread from the first turkey farm to nine other farms wasn't a dangerous form of the virus called highly pathogenic avian influenza (HPAI). Instead, the strain at the nine new farms is low-pathogenic—a type that doesn't make the birds sick. In both cases, the new strain is called H7N8 and has never been a problem in poultry flocks before. USDA said it appears the low-pathogenic strain of H7N8 had been circulating among flocks and had somehow mutated into a highly pathogenic form that affected the first farm. Highly pathogenic avian influenzas can sweep through turkey and chicken flocks, killing them in days or hours.

The Good News! (according to the Associated Press)

Animal health officials monitoring a bird flu outbreak in southwestern Indiana say most restrictions on poultry in that region will be lifted by February 22 if no additional cases are found. The last positive bird flu case was Jan. 16 in Dubois County, Indiana's top turkey-producing county. If no additional cases are found, testing and surveillance of commercial poultry farms will end Feb. 22 within the 12.4-mile radius around the first farm where the virus was detected.

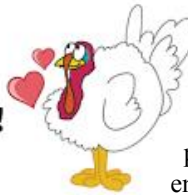
While those restrictions will be lifted, quarantines will remain in place on the 10 affected farms until they're declared virus-free. More than 414,000 turkeys and chickens were euthanized at those farms to help contain this viral outbreak.

How Does a Farm Become Infected with Bird Flu?

A study identified that very few affected farms have their own designated vehicles and equipment, which could be a route for bringing the virus onto farms. It is not feasible to expect every farm to have its own feed truck, for example, but it is important to know where the vehicles entering your farm come from, and make sure they have been effectively cleaned and disinfected.

A concerning pattern was that on approximately a third of the study farms, the producers had seen wild birds in the barn, which is another potential pathway to bring disease in. The study also looked at the role of wind spreading the disease and found that air samples could test positive for virus between 70 and 170 meters away and suspected virus could be found in air even 500 meters away from infected farms. When farms are close together, it was difficult to rule in or out the effect of wind.

Biosecurity Keeping Birds Healthy!



Whether it's wind related or not, **the distance of the nearest infected farm was by far the most important factor related to being a positive farm.** Other items of significance were: the larger the acreage of corn in the area, the higher the likelihood of being an infected farm; the density of poultry and the type of poultry farm were also important factors. Tilling of nearby fields emerged as an important factor in the early stages of the outbreaks. This may have been how the virus became airborne initially. Later on, the presence of non-asphalt roads was associated with infected farms.

A comparison of infected with non-infected farms showed that vehicles entering the farm in the two-week period prior to infection formed a key risk factor. The study showed that 29% of case farms compared to only 3% of control farms had rendering trucks which entered the farm and got near the barns; and on 61% of case farms compared to 23% of control farms, garbage trucks entered the premises going near the barns.

Other risks included visitors to the farm not changing their clothes, and having service personnel enter the farm. Producers should find out where service personnel have been and check biosecurity protocols for these visitors.

At the barn level, studies showed that having dead birds exposed near the barn was a risk factor. Having a disinfected hard surface entrance to the barn and having sealed roof ventilation were protective factors.

Mortality Management of a Catastrophic Event

A huge challenge posed by an avian flu outbreak is how to safely and effectively dispose of potentially hundreds of thousands of birds killed as a result of infection and eradication efforts. There are four ways to dispose of such large numbers at a time: incineration, onsite burial, landfilling and composting. Onsite composting seems to be the best option, as it would prevent contamination of water, effectively destroy the pathogen and eliminate the risk of spreading the disease to other farms.

Composting hundreds of thousands of birds would require a large amount of carbon-rich amendment material, such as sawdust, wood chips, yard trimmings or straw. Birds are low in carbon and too wet, so an amendment material is needed to compost them. For egg laying operations, a slab composting method that includes a one to two foot base of wood chips or mulch, followed by layers of chickens, finished compost and mulch. The top and sides of the slab are covered with amendment material, which insulates the slab and helps prevent leakage and odors. A pile measuring 100 ft. long and 100 ft. wide would be needed to compost 150,000 birds at the same time. The pile is left without mixing for at least two weeks. The temperature generated by the composting process will kill the virus. After this, the pile could be left to further degrade or be turned.

For broilers and turkeys, you could use the bedding material that's already in the broiler or turkey houses and mix the dead birds in. Then you make a windrow (a long, low heap of composted material) inside the facility.

Besides being a safe and environmentally friendly way for producers to dispose of dead birds in the event of an avian flu outbreak, composting would also generate a good fertilizer product that the farms could use for their crops.



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Here



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Dates to Remember ...

Michigan CAFO Annual Reports Due — April 1st

Category 14 Test Dates: Regional

Mar 7 3:00-6:00 p.m.—Wayne Co. Fairgrounds, Richmond
at Purdue University

**Mar. 18 & 28; Apr. 12 & 14; May 5; June 2 & 6;
July 6; Aug. 3; Sept. 6; Oct. 3; Nov. 22; Dec. 13**

Cat. 14 Exam at Remote H&R Block Testing Centers

Locations: Ft. Wayne & Mishawaka; Call 1-800-345-6559 to schedule. Registration fee of \$29.

**Advanced
Registration
for Regional
Testing Call:**
800-319-3090
Email:
cjanssen@pur
due.edu

EXAM PROCEDURES for all locations:

1. Location: Stewart Center, Starts at 1:30 PM
2. Bring a government-issued photo ID
3. Exams are closed book, multiple choice
4. Only single-function calculators without printers are permitted. NO cell phones, PDAs or computers
5. Exam time limit: 90 minutes

Parp & CCH point meetings

- Mar 9** Producers program **PARP** Andersons in Waterloo 5-7:30 PM Crystal Van Pelt 260-665-9037
Nutrient Timing and Placement; Nutrient Management Plan; Fertilizer Recommendations and Record Keeping
- Mar 9** Michiana Vege. & Fruit Growers mtg. **PARP** Elkhart Community Cntr, Goshen 9 AM-4 PM Kelly Heckaman 574-372-2340
Fungicides on Vege. Crops; Brown Marmorated Stink Bug, Spotted Wing Drosophila, other insects; Fertility Check High Tunnels; tomato Support in High Tunnels; Food Safety Modernization Act; Drift watch
- Mar 9** Producers program **PARP** Allen Co Extension Office, Ft Wayne 12 noon-2:30 PM James Wolff 260-481-6434
Nutrient Timing and Placement; Nutrient Management Plan; Fertilizer Recommendations and Record Keeping
- Mar 15** Allen Co **PARP** Allen Co Extension Office, Ft Wayne 6:30-8:30 PM James Wolff 260-481-6434
On Farm Research Results; Water Quality Challenges & solutions; Atrazine & Water Quality
- Mar 17** Wabash Ann. Mtg **PARP** Heartland REMC Touchstone Energy Cntr, Wabash 8 AM-12 noon Curt Campbell 260-563-0661
Sprayer Cleanout; Pollinator Protection; Watershed Report
- Mar 17** Miami **PARP** Community Bldg, Miami Co Fairgrounds 6-8:30 PM Gary Horner 765-472-1921
Sprayer Cleanout; Paraquat Poisoning; Pollinator Habitat Management
- Mar 22&23**(choose one day only) Sprayer Clinic **PARP** TruHorizons, Milford 9 AM-12 noon Kelly Heckaman 574-372-2340
Droplet Size Matters; Nozzle Selection; Water Conditioners; Surfactants; Sprayer Cleanout; Spray Table Demo.
- Mar 24** TriState Farm Expo—**PARP** sessions Potawatomi Inn, Pokagon St. Park 7:30 AM-3:15 PM Crystal Van Pelt
Safe Pesticide Handling; Personal Protective Equipment; Manure Guidelines; Using Manure as a Fertilizer; Irrigation to Incorporate Herbicides and Fertilizers