Tips On Applying Poultry Manure To Soil

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Before May 11, thousands of tons of dry matter poultry manure will be applied to soils in Pennsylvania.

Average values of plant nutrient composition from laboratory tests indicate poultry manure is relatively high in nutrients. For example, fresh poultry manure contains on the average 30-20-10 pounds of N-P₂O₅-K₂O per ton, and dry poultry manure may contain 90-70-40 pounds of N-P₂O₅-K₂O

The plant nutrient content of poultry manure varies widely. However, because of variation in poultry ration, age, and productivity of the animal, moisture content of manure can vary widely. Time in storage may cause wide variation in microbial activity in manure which may increase moisture content of manure or cause toxic gas to form. This can cause significant changes in the plant nutrient content of the manure. Odor increases with number of anerobic microbes. Unidentified factors in poultry manure, allowed to remain warm and wet for 28 days or longer in storage, can cause plant toxicity when applied to cropland.

More poultry manure is being dried and stored in cage houses today than ever before. This is done by controlling leaks in waterers, diverting outside surface water, stirring the manure, and drying it with fans. This reduces the weight of manure hauled to the field three- to sixfold as well as making the material more spreadable. This process also lowers the quantity or alters the quality of ammonia fumes in the house which seems to maintain bird health, growth rate, egg production, fertility, hatchability, and eggshell quality. Drying fresh manure before storage holds it nitrogen value and does not allow anerobic microbes to reproduce and generate odor, toxic gases, and other compounds.

Cropland usable

It is recommended that all poultry farms have a minimum of 2-5 acres of high quality cropland usable for manure disposal per 1,000 head of poultry capacity on the farm. The amount of acreage needed varies with the soil and crop. Useful acreage is interpreted by most farmers as being less than one mile from the barn or poultry house. Nearly all manure on most farms is spread in this area or even a smaller area. These guidelines result in fairly low annual application rates per acre.

A serious problem results in that it is nearly impossible to purchase a manure spreader in Pennsylvania that will apply 1-2 tons (dry matter) of poultry manure per acre as recommended. Most spreaders will spread 4-6 tons (dry matter) per acre at the minimum setting.

Some spreaders have little or no control of how much manure is applied, except for the speed of spreading. DRIVING A TRACTOR AND SPREADER TOO FAST MAIMS OR KILLS TRACTOR

OPERATORS. Some new spread-

ers have hydraulic feed into the paddles that can be reduced for low quantity spreading. Some side-delivery spreaders have adjustable doors, also.

Soils receiving applications of poultry manure should be tested annually to determine build-ups of plant nutrient levels in soils. Excessive applications can cause nutrient imbalance and increase the soluble salt levels in soils, thereby causing crop yields to decrease. This soluble salt problem is usually greatest immediately after spreading. Excessive applications can easily lead to surface and groundwater pollution problems. Soil testing is a useful monitoring tool, and when used in conjunction with manure analyses, can provide guidance in determining appropriate agronomic and environmentally sound application rates. Details about soil and manure analysis can be obtained from any county cooperative extension service office.

Market for manure

The market for poultry manure as a fertilizer has strengthened since 1972 when less than 10 percent of all poultry manure or litter was sold. Now we estimate that 30 percent of all poultry manure is sold from Pennsylvania farms for prices ranging from \$3 to \$9 per ton for wet or chunky dry manure, to as high as \$25 per ton for dry manure (less than 30 percent moisture) in bulk at the farm.

Bagged manure in farm and garden centers commonly sells for prices ranging from 3 to 10 cents per pound, depending on bag size. This is equivalent to 60 to 200 dollars per ton. One cannot accurately guess the plant nutrient content of manure. Thus it should be analyzed to determine its value. Manure analysis mailing kits are available from the county cooperative extension service offices.

The reason for most of the citations for pollution issued by authorities to farmers in Pennsylvania has been because of objectionable odor complaints filed by neighbors. Most of these have been because of wet manure or litter generating toxic gas or odor because it is stored more than 28 days without being dried. Other citations include, but are not limited to, water pollution or dust and feathers as a nuisance.

A few farmers have paid fines for polluting water on or nearby the farm or area where manure is spread. The potential for spread of avian disease agents, including avian flu, is present where fresh manure from an infected flock is spread near non-infected hirds

Using large amounts of manure and high level applications of commercial fertilizer together on the same acre is absolutely not recommended. Manure should be spread at least 30 days before planting time. If crop toxicity appears, extend spreading interval to 2 to 4 years, not annually.

May 1983 - This article was written in consultation with Dr. Ray Shipp and Dr. Doug Beegle, associate professors, extension specialists in agronomy extension.

NEED

Committee Approves Budget

CHICAGO, Ill. — A fiscal year budget of \$606,000 was approved by the Deli/Prepared Meats Committee at its meeting March 18 held here in conjunction with the Meat Board annual meeting.

Along with heathcare professional, education, and media public relations programs, the budget includes \$150,000 for the committee's new National Breakfast Month retail promotion. If successful in September, this pilot project could become an annual event, similar to National Meat Month, according to Bob Nissen, Webster City, Iowa, committee chairman.

The committee also voted unanimously to change its name from the Processed Meats Committee to the Deli/Prepared Meats Committee. According to Nissen, the newly adopted name better reflects the positive image the committee conveys about these products.

FOR SALE

Canoe voyager type 19' capacity 1100 lbs. wght. 120 lbs. takes 20 HP motor \$500, 717-465-7537.

Fruit crates bulk bins pal-lets, sawdust, mulch, firewood rough cut lumber. Mt. Valley Farms, Biglerville (Adams Co.) Pa 717-677-6166.

Kitchen combine antique finish, good shape, 143 Voganville Rd., New Holland 17557. 717-656-6727.

AKC Pomeranian puppies shots & wormed, all colors. Lanc. Co. 717-442-4713 let ring.

Ford 3000, JD 2240 MFWD w/new 245 loader sm. NH PTO manure spreader 6' rotary mower. York Co. 717-244-0362.

IH 710 5 btm. 16" auto reset semi mtd., 16 hole disc. grain drill, JD cultimulcher 12' hyd. Warren Co. 201-459-4397.

1970 Chevy tandem 20' all steel grain dump body; Inter 706 w/310 engine; 1976 F350 Ford w/12' utility body. 301-239-8234.

1000 lb. cap. Fairbank platform scale, 2 row Stauffer tobacco planter on steel wheel, glider spring, rocky chair. 717-354-0616.

Boumatic pump 5 HP motor staınless steel air tank, JD 290 cem planter, Nr man-ure spreader 206. Dau. Co. 717-362-9233.

Foam incubators also silkie chicks Barbara Hamm, 722 W. Main St., Weatherly, Pa. 18255. Carbon Co. 717-427-4298

2 sets truck chains 11.00x22 cross link, brand new \$50 set. Lehigh Co. 215-285-6697.

Purebred Saanen goats, all ages, from kids to milkers. Montg. Co. 215-323-0816 for details.

Complanter Oliver 4R nozzles, model 540 good shape, shed kept, also steel wheels for Farmall H tractor rear. Bucks Co

Farmall F-12 tractor 1937 rebuilt motor, good paint, \$800, NI loader for JD A or others has dirt bucket, \$350. Bucks Co. 215-766-8186.

1985 Mercury grand Marquis fully loaded garage kept 43,000 miles asking \$6900 or best offer. Luzerne Co. 717-287-2138.

1974 Gene trailer 12,000 lb. dual axle w/ramps 17' bed 8' side. Chester Co 215-263-3258 after 7 p.m.

NH 1495 haybine gas full cab. Lacka. 717-945-9303.

5 feeder hereford steers. Adams Co. 717-528-4362.

66" all-purpose dirt scoop for Dunham loader, like new, only used a few times \$250. Berks Co Berks Co. 717-933-8764

AC WD tractor AC snap Lanc. Co. 717-426-3871.

Int. #468 4-row front mounted cult. A-1 cond., 165 gal. Walsh fiberglass sprayer tank w/saddle. York Co. 717-229-2352.

Scotch highland spring calves for summer weaning. Write Roger Jestel, 223 Moul Rd., Hilton, NY 14463. 716-392-9062.

Polled hereford bull 700 lbs. \$450, 2R pull corn planter \$195, JD plow 2-14 3 pt., \$195, NH baler model. Adams Co. 717-528-4166.

Reg. Dorset ewes, total of 5 various ages former FFA project, also locust posts Lanc Co. 717-354-5939.

8 yr. old saddlebred carriage horse, needs work a man's horse. Christ E. Riehl, 355 Newport Rd., Leola, Pa. 17540 at Monterey.

7'x16' wooden overhead garage door w/all hardware good cond., \$100 or best offer. Lanc. Co. 215-267-3209 after 6 p.m.

Mower - Ford #902 rotary pull behind, 100" cut, new; belts, blades, bearings & deck, \$850. 609-586-2869.

JD 60 3 pt., fenders, good rubber, extremely nice tractor \$2600, JD 4010 gas NF nice tractor \$3700. Winchester, Va. 703-662-5155, 667-9497.

Hunterdon Co. 83 Ford Fairmont 4 door 6 cyl. auto, air, PS, PB, vent windows, delay wipers, AM-FM radio good running cond., 201-782-6494.

2 Conestoga Valley indian doors, also other antique doors, take a look, make an offer. La 215-445-4092. Lanc.

45 Brillion cultimulcher teeth \$100, 10' spring tooth harrow \$200, SP22 vac-uum pump \$100, 1½ " pis-ton pump. Adams Co.

21 heavy disk blades 19 in. \$5 ea., 3 tires 13-38 \$15, York 717-235-2032.

Int. 411 4 btm. 16" 3 pt. hitch, 311 3 btm. 16" 2 pt. hitch both w/colters & coverboards. Montg. Co. 215-754-7115.

NI 702 tractor & motor parts gas, pan for 679 spreader must sell, will sell, make offer. Lanc. Co. 717-733-7069.

1955 Farmall 100 cult., 1955 Oliver super 3 in. irr. pipe fitting, JD 7x13 drill, 7 tool bar, 609-697-2853, 609-697-2643.

Air cleaner assembly 8"x18", 3½ " inlet, 3½ " out-let, Baldwin-PA 2418 FN element, fits MF 550, 750, 850 combines, etc., \$50. 215-445-4463.

Soybean seed from last yr. certified CX415 also Williams variety combine run or cleaned. Eli Nolt Farms. 717-866-2406.

Ford 3000 tractor 3 cyl. gas turf tires, looks runs great \$4,000, Woods 5' rotary \$600, both \$4,500. Berks Co. 215-589-5164.

G.Q.F. model #0402 mother hen elec. brooders, good cond., \$75 ea. Berks Co. 215-488-6886.

Cookstoves! restored ready to burn, firebrick, grates, plates, etc. for many brands roadside stand used 4 wks. 36"x90"-3 shelves \$125. Leb. Co. 717-949-2195.

800 bushels noble oats from last years' certified seed, delivery possible, also bright wheat straw. North'd. Co. 717-672-9740.

Cub equipt. plow, disc, harrow, sickle bar plus xtras good cond., \$300 or BO. Del. Co. 215-459-1209.

Old driving horse for pet can still be hitched up for driving on road, paper of his age included. Lanc. Co. Benjamin K. Swarey, 420 Little Britain Rd., Peach Bottom, Pa. 17563.

8-16 hole Smedley hog feeders, SS bottoms, top-adj., % ton cap.; marting port. hog scale, 500 lb. cap ex. cond. Dau. Co. 717-533-7328.

Gravely mower excel. for Christmas trees reinforced deck for commercial use recent overhaul \$950. Huntingdon Co. 814-447-3571.

High side hay wagon (wood) \$495 OBO. York Co. 717-432-4228 after 6

AC pull behind combine w/ PTO & bin, barn kept good cond., w/manual, also one for parts, best offer. Chester Co. 215-869-2791.

Spring tooth harrow 3 section MF 2 btm. plow, MF 165 good cond., offset, Bush Hog 12, JD 7 snow Lehigh Co. 215-965-2268.

NI 486 round baler \$4000, NH 717 chopper both head, \$2000, NH 269 baler **\$1500. Chester Co.** 215-358-5914.

NI 717 uni-combine w/713 grain head, 731 4RW corn head, \$3000, NI 743 3RN snapper head, Carroll Co. Md. 301-775-2723.

AC-WD tractor w/live PTO & pulley for parts or restore \$250, Oliver 70 2 40" tires mounted 75% tread, \$100, also 2 11"x36" tires mounted, may be used on old JD B tractor wheels \$60. Montg. Co. 215-539-5045.

Wrecked Farmall model H for good parts \$250, anti-que 1952 Dodge w/good stk. body. 2 motors & 2 4 spd. trans., \$250. Montg. Co. 215-539-5045.

Seed oats oagle 3.50 bu. also soybean seed, JD 12' harrow good cond Monroe Co. 717-381-3785. call after 5 p.m.

IH 560 gas tractor w/draw bar, good cond., \$3,500. Lower North'd. Co. 717-758-6221.

Int'l. 18' vibra-shank good cond., 2 20.8x38 radial tires mounted on rims for duals. Cecil Co. 301-398-1541.

White 2-60 4-wheel drive 60 hp. 2973 hr., 9.6-24 front & 16.9-30 rear tires 90% tread \$5,900. Juniata Co. 717-694-3888.

250 AMP engine driven Miller welder \$800, 16 hp Briggs w/centrifugal clutch \$275, 12 hp cub tractor. 717-859-2797.

Small surge vacuum pump & milking units, 1 surge hanger, 1 Delaval floor unit, good cond., will divide. Otego, NY. 607-433-2681.

Spring wagon w/hyd, brakes solid wood bed, seat w/back 4 coats paint Lanc. Co. 717-859-3833

IH Farmall 140 like new cond., \$3900, Bucks Co. daytime Call 215-357-6818.

1955 Farmall Cub w/snow blade, plow, disc harrow, cult., spring tooth harrow, side mount mower, chains, platform carrier. Adams Co 717-677-7963.

3 quail breeder cages w egg trays, 1 grow cage, all wifeed & water trays \$25 e a . York Co. 717-927-9105.

Mounting bracket & 12 suit-case wghts. for the Int. 1066 tractor, best offer. Amos Blank, 254 Mascot Rd., Ronks, Pa. 17572

816 Gravely w/50" mower 33" rear tiller v.g. baltimatic fert. spreader 3 pth. nice. Col. Co 717-784-0848. Winc model 84 serial #183L6454 32 special- v.g cond. \$275 firm. Montg Co. Harry Miller.

215-584-4545 12" goooseneck for a 25" harvestore silo \$300. Leb Co. 717-273-2910.

1979 IH 1086 130 hp. cab air/heat 18.4R-38 dual hyd. dual PTO \$14,450, IH 720 automatic plows 5x18* spring reset \$2950 both ex cond. Col. Co. 717-437-2315.

63' Badger conveyor #70 w/motor \$800. Lanc. Co. 717-367-7437

Ontario 14 hoe grain drill on steel \$200, approx. 300 bales 2nd & 4th cutting alfalfa 1.65 bale. Dau. Co Michael Rovak, 0 Roval Middletown, Pa 17057

General farm tractor ok & running orig. paint \$850, also Ford 4000 w/loader. Union Co. 717-524-2410.

710 H plow 5B 16" like new \$1600, JD MT tractor w/3 pt & plow cult., good cond. \$2000. 717-966-1754.

2 britch harnesses, no lines or bridles, \$85 ea. Juniata Co. David M. Swarey, Rt #1 Box 766, Mifflintown, Pa. 17059.

Sawed locust posts & firewood Jonathan M. Zook, 27 William Run Rd., Christiana, Pa. 17509, ¼ mile west of Christiana.

Flat btm. Girton milk tank extra cooling coils on btm. ideal for market or produce cooling, also 3 HP compressors. John B. Zook 5208 Peters Rd., Kinzer Pa. 17535, Lanc. Co.

1950 Chev. grain truck, nice 14' bed, good rear tires, no rust, ideal for restoring \$1250. York Co. 717-246-1596.

Strong-Welsh gelding, loves trails, possible show, 8 yrs. old, bridle, saddle included, outgrown by owner, negotiable. Chester Co. 215-696-5916.

Goats 2 does & wether, 1/2 nubian, ½ pygmy bottle raised \$55 ea., all for \$160, Reg. Nubian bucklings \$150. 215-469-9234.

9 yr. old Morgan carriage horse, broke, \$925. Reuben R. Lapp, 903-A Vintage Rd., Christiana, Pa. 17509, Lanc. Co.

10# Briggs engine, good cond., best offer. Lanc Co. Levi Z. Fisher, 520 Cains Rd., Gap, Pa. 17527.

JD 4030 tractor, quad range, good cond., JD 1240 plateless planter good working cond., NI 3 pt. mower good working cond. Lanc. Co. 717-354-7151.

5 springing holstein heifers, best offer. Lanc. Co. Elam F. Lapp, 10 Brubaker Rd., Lititz, Pa. 17543.

MF 35 combine 8' cut selfpropelled good cond., JD 520 tractor 3 pt. PS live hyd., JD cults., JD 3-14 3 pt. plow. York Co. 717-235-5189.

JD 5½ ' hay head, for 38 or 3800 harvester \$400. Lanc.

Co. 717-284-2444.

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