



## Teagasc Pig Newsletter – February 2011. Vol. 14, No. 1

Newsletter Schedule .....	1
Pig Manure is a Valuable Fertiliser .....	1
Management & Work Ethic on Pig Farms.....	3
Prolapse Problems .....	5
Tailbiting: A Gender Issue? .....	7
Monster Pigs at Moorepark.....	8
February 2010 prices .....	9

### **Newsletter Schedule**

As with last year, the printed Teagasc Pig Newsletter will be sent to you three times yearly in April, August and December. An electronic newsletter will be sent out during each of the other nine months. Back issues of all publications will be on our Teagasc website [www.teagasc.ie/pigs](http://www.teagasc.ie/pigs). If we don't already have your email address or if there is someone you want to add to our list please let us know.

### **Manure Management**

#### **Pig manure is a valuable fertilizer**

**Gerard McCutcheon, Oak Park**

Organic fertilizers are a valuable source of nutrients to supply the nitrogen (N), phosphorus (P) and potassium (K) requirements to grass and other crops. By far, the most common form of organic fertilizer in Ireland is cattle manure. In practice, most cattle manure tends to be spread on the grassland farms where it is produced. Of the organic fertilizers that are commonly traded as fertilizers between farms, pig manure is the most common form. I have had many queries on the value of pig manure in the past few weeks and this article aims to answer many of those questions.

## **Nitrates rules changes**

A farmer receiving pig manure must record and account for this manure in his fertilizer plan and maintain associated records for compliance with the nitrates regulations.

Recent changes in the nitrates regulations (S.I. 610 of 2010) have made pig slurry a more attractive fertilizer option. Firstly, the transitional provision that allowed maximum P application rates to be exceeded with pig and poultry manures and spent mushroom compost was extended. Also, the changes to the N index system for tillage crops means that using pig manure will no longer affect the N index and the subsequent N allowance for tillage crops in later years.

## **Phosphorus**

Pig manure is an excellent source of P for crops and grassland. Up until the end of 2012, pig manure can be applied at rates that exceed the crop P requirement. From 2013 onwards, there will be a limit in the amount of surplus P that may be applied, starting at 5 kg/ha in 2013 and 2014, decreasing to 3 kg/ha in 2015 and 2016, with no excess P being allowed from 2017 onwards.

While a farmer may, for now, apply pig manure and exceed the P requirement, it is still very important and economically sensible to utilise the pig manure as efficiently as possible and reduce chemical P fertilizer application rates as appropriate. Pig manure is particularly effective in fields with low soil P levels to build up the soil fertility.

## **Fertilizer replacement**

Using pig manure should be considered wherever possible as a way of reducing fertilizer costs. According to the nitrates regulations, pig manure will contain a total of 4.2 kg of N, 0.8 kg of P, and approximately 2.2 kg of K per cubic metre. The P and K can be considered to be 100% available, while N will be approximately 50% available if applied under optimal conditions by either ploughing immediately after application, or by applying to a growing crop using a band spreader or trailing hose application. Spring application is best in order to maximise the N availability to the crop. The

value of the nutrients in a cubic metre containing the nutrients as above is €6.13 or €27.86 per 1000 gallons (based on December 2010 fertilizer prices).

All farmers are invited to **"Efficient Use of Organic Fertilisers on Tillage & Grassland Crops"**. This event will be held at **Oak Park Research Centre** on **Thursday, 3rd March, 2011 at 2pm.**

The event will showcase the latest technology in slurry management on grassland and tillage farms. Organic fertilisers are a valuable nutrient source and correct management is essential to meeting crop nutrient requirements and controlling production costs.

***Topics will include:-***

- Current research findings in tillage & grassland crops
- Slurry values & fertiliser planning
- Efficient utilisation and fertiliser programmes
- Recent updates to nutrient legislation
- Current and future slurry technology – with live demo on site

Full details are available on [www.teagas.ie/pigs/events](http://www.teagas.ie/pigs/events)

Can you think of some farmers that should be encouraged to attend this event? It is important that all farmers continue to see the value in pig manure. **(Admission is free).**

## ***Staff Management***

### **Management & Work ethic on pig farms**

***Seamas Clarke, Ballyhaise***

Farm output and profitability is the dependent on both the farm manager and the staff. Responsibility rests on "all shoulders". Staff happiness and staff longevity is

management's responsibility. While the work ethic is lead by the farm manager, staff have a responsibility to ensure that the managers lead is followed.

### **Worker's responsibility**

- Carry out duties fully each day with the 'good' of the pig farm foremost in your mind!
- Seek information from management re: methods, changes, technologies best suited to the output of the pig farm
- Apply this knowledge to the farm's benefit and report the outcome to your manager
- Inform management of failures, weaknesses, problems, difficulties
- Discuss with manager at an appropriate time and make necessary changes with managers agreement
- Don't waste time! It annoys everyone; the manager, fellow workers and owner. Hiding from work can be a problem on many pig farms! Too many minutes in the 'jacks', on the 'mobile' or in the 'office' is unacceptable. It also puts an extra burden on your fellow workers!
- '**First in / last out**' for breaks is not a friend to fellow workers, manager or owner. You **will** be noticed!
- Cooperate with fellow workers! Give a hand when the pressure in on! It will be your turn 'tomorrow' for a helping hand!
- Don't rush your work to the point of doing it badly. Examples such as speedy serving, vaccinating, pig moving, and inspecting pigs will lead to poor output and many failures.
- Do not neglect duties! The 'missed repeat heat', the 'unclipped litter', the 'un notched' breeding female, the unnoticed 'scouring' piglets or the unnoticed 'lame' finishing pig all lead to poor productivity on the farm. Laziness **could** cost you your job.
- Plan 'time off' well in advance! It may be **easier** to get and allows for work replacement!

## **Manager's responsibility**

Output and profit will come with good staff relationships. Communication is the key!

- Health and Safety issues are your responsibility
- Treat staff fairly and without 'bias'
- Take 'immediate' action on time keeping breaches, poor work practices and aggressive behaviour with fellow staff or farm stock
- Bullying must be watched for and sorted
- Encourage communication at appropriate times
- Keep staff updated on technical issues on the farm
- Promote a good 'work ethic' on the farm
- Inform new staff of their duties and responsibilities
- Discuss ***in private*** 'issues' arising with individual staff members
- Breaches in work practices should be noted, verbal warnings issued, followed by written warnings, before dismissal.

Constructive management and motivation is the key to success. Two-way communication is essential. Develop a good work ethic, lead by example, and the staff will follow.

## ***Stock Health***

### **Prolapse Problems**

***Ciarán Carroll, Teagasc Moorepark***

Rectal prolapses have been a problem again lately on several units. The size of prolapse can vary. If small enough it will often revert into the rectum. However, in most cases it remains out, becomes swollen and fills with fluid. This can lead to other problems, e.g., haemorrhage, cannibalism by other pigs, swollen abdomen and even death. The basic cause is an increase in abdominal pressure which forces the rectum to the exterior and a swelling of the mucous lining and then straining. Identifying and eliminating the causes can significantly reduce losses on a unit.

## **Possible Causes**

- Diarrhoea – excessive straining
- Respiratory infection – excessive coughing increases abdominal pressure
- Colitis – abnormal fermentation in the large bowel with the production of excessive gas increasing abdominal pressure
- Cold weather – associated with low house temperatures and the tendency of pigs to huddle together, thus increasing abdominal pressure
- Wet conditions and slippery floors
- Stocking densities – overstocked pens where pigs cannot lie out properly
- Water shortage – leading to constipation
- Mycotoxins in feed – examine feed/ingredients and feed bins for signs of mould. Clean out bins regularly and use a mould inhibitor in the diet.
- Change of diet may trigger a prolapse problem
- Medication – high levels of antimicrobial medication in the diet
- Tail docking – docking tails too short can damage the nerve supply to the anal ring leading to a relaxation of the anal sphincter muscle

## **Treatment**

- Identify early and remove severely affected pigs to a recovery pen
- Replace the prolapse and retain it by a purse string or mattress suture (contact your vet for advice)
- Where the prolapse has been bitten off by pen mates the pig can be left in the pen as most will progress to slaughter. Treat with an antimicrobial to prevent infection.

## **Records**

Keep records on each prolapse to see if any common factors emerge, e.g. age of pig, weight of pig, number of days in the house, house and pen type, diet fed, change of diet, stocking density, state of prolapse, tailbiting evident.

## **Research highlights**

### Tailbiting: A Gender Problem?

**Laura Boyle, Teagasc Moorepark**

Pigs' tails have traditionally been docked at birth to prevent tail biting which has negative welfare and economic implications for the pig sector. Routine tail docking is now prohibited in the EU but leaving pigs tails long may aggravate tail biting. Last year we kept the tails of 448 pigs long i.e. undocked, and inspected them for injuries at transfer to the 2<sup>nd</sup> stage weaner accommodation. We wanted to test the effects of gender and individual characteristics such as the pigs ability to cope with stress and its weaning and transfer weight on tail injury scores to see if any of these characteristics would help us to predict whether a pig would suffer from tail biting or not. To evaluate each individual pigs ability to cope with stress we subjected them to a 'backtest' at 27 days of age. Each piglet was placed on its back in a v-board and restrained by one hand placed lightly over the throat of the piglet and the other holding the hind legs. Piglets were held in this position for 1 minute during which time we counted all the struggles as escape attempts and summed them to give a 'backtest' score for each piglet. At 28 days of age piglets were weaned, ear tagged, weighed and put into 32 single sex pens in groups of 14 pigs in the 1st stage weaner accommodation. They were fed a pelleted diet from multi-space dry feeders and water was available ad libitum. Each pen had a length of natural fibre rope and a length of plastic piping through which a chain was passed and suspended at both ends from the pen partition to fulfil the environmental enrichment requirements of the pigs. When the pigs were about 56 days old/17kg, they were inspected for tail injuries which were scored according to severity and weighed again. We found that 29.6% of pigs had bitten tails which is a worryingly high figure. There was a higher proportion of pigs that were bitten in pens of females compared to in pens of males (33.7% vs. 24.7%) which would suggest that females are more likely to bite. However, our findings also indicated that tail biting was much more strongly influenced by the characteristics of the group than any of the individual characteristics measured (i.e. gender, back test scores, weaning or transfer weight).

Indeed, there were 4 pens in which none of the pigs had a tail injury. These findings support what we already know from practice which is that tail biting outbreaks are difficult to predict. Research into the factors that make a particular group of pigs more likely to experience an outbreak of tail biting compared to another group might prove to be fruitful in understanding how to predict and manage tail biting outbreaks in undocked pigs.

## ***News from Moorepark***

### **Monster Pigs at Moorepark**

A recent litter of pigs at Moorepark weighed in at 29kg born alive! The litter, from a third parity sow, comprised of 13 born alive, 2 born dead and 1 mummified. The heaviest pig weighed in at 2.95kg, followed closely by a 2.8kg and 2.65kg competitor. The born dead piglets weighed in at 2kg each. Based on the number born alive, the average birth weight was 2.23kg per piglet.

By day 5 after farrowing the two heaviest pigs had put on 1kg live weight (3.9kg and 3.8kg respectively). The sow has good form: her second litter comprised of 17 born alive (28.7kg or 1.7kg per piglet), 1 born dead and 1 mummified. Although her first litter had a low 9 born alive, they weighed in at 18kg or 2kg per piglet!



***Spot the 2.95kg piglet?***



***How the neighbours looked!***

A recent Dutch field survey of over 41,000 piglets had average birth weights of 1.4 kg (variation of 0.26kg) from an average total born of 13.4 per litter. What are your birth weights?

## **Feed and Pig Prices**

### **February 2011 Prices**

**Michael Martin, Athenry**

Prices of purchased feed for February 2011 are as follows. Prices (€/t) exclude medication.

	<i>Average</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Range</i>
Creep/starter pellets	858	796	1036	240
Link pellets	550	505	594	89
Weaner pellets	335	310	362	52
Finisher (meal)	278	258	291	33
Pregnant sow (meal)	266	245	295	50
Lactating sow (meal)	298	266	331	65

Composite feed price, per tonne: €299; Feed cost, per kg carcass: €1.10

Finisher pig prices, per kg carcass - €1.43 (range €0.09; €1.39 to €1.48)

Sow prices, per kg carcass – €0.70 (range €0.16; €0.59 to €0.75)

**Margin over feed (MOF) = €0.32 per kg**

**MOF down €0.28 from August; No change from January; 12-month average €0.45**

We thank the producers who supply prices to us.

Further information:

Ciarán Carroll,

Phone: (025) 42388

Email: [ciaran.carroll@teagasc.ie](mailto:ciaran.carroll@teagasc.ie)