



# pigbytesnewsletter

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## IT NEVER RAINS – THEN IT FLOODS

What began as a very good season has turned into a disaster for some with piggeries flooded and crops destroyed. For some the Christmas holiday period is stressful at the best of times therefore it is important that if you feel things are getting the better of you that you call for help – whether it be your caring I&I pig officer or Industry and Investment's Rural Support Workers who are located across NSW.

<http://www.dpi.nsw.gov.au/agriculture/emergency/drougt/assistance/support/support-workers>

## WEATHER DAMAGED GRAIN AS PIG FEED

With such widespread rain and floods there is going to be a lot of weather damaged grain. This can be used as stock feed providing the following precautions are followed:

- Be aware that there is high likelihood of mycotoxin contamination even if you don't see any mould on the grain sample. Be cautious if feeding to pregnant or lactating sows or weaners and use a mycotoxin inhibitor in the ration. Mycotoxins can cause abortions and death.
- Get the grain samples tested for nutrient value so the rations can be formulated accordingly. Sprouting can make some nutrients more available for digestion by the pig but this is influenced by the degree of sprouting, moisture content and storage conditions. Energy values could be affected if grains were 'shot and sprung' with leaf and rootlets.
- The amino acid balance can be affected by the sprouting. In hydroponic barley sprouts past analysis has shown a decrease in lysine in 2 day old sprouts but an increase in lysine for 4 to 7 day old sprouts. Tryptophan increased but methionine, phenylalanine and threonine decreased dependant on age of sprouts. (*Non-traditional feed sources for use in swine production Eds Thacker and Kirkwood pp33-42*) Either use a properly

formulated feed ration or be sure to at least include a premix that includes the necessary amino acids for your pigs.

- FCE is likely to be depressed for diets based on weather damaged (sprouted) grains particularly if palatability is affected.

There is a paper from the Australian Journal of Agricultural Research 1991 that outlines the use of weather damaged grains in stock feeds based on Queensland information accessible through the following link:

<http://era.deedi.qld.gov.au/637/1/BlaneyEffectiveUse-SEC.pdf>

There is also a presentation at the following link from NZ and the precautions for using weather damaged grains.

<http://www.nzpork.co.nz/LinkClick.aspx?fileticket=73q59GXDcHM%3D&tabid=93&mid=691>

There is a list of AusScan NIR laboratories in Queensland, NSW and Victoria at the end of this newsletter.

## SUMMER CHECKLIST

Summer is here and there are a few reminders to help keep your piggery operating at optimal performance.

1. **Refrigerators storing your veterinary chemicals** – The hot weather can make your refrigerator work harder than necessary if you neglect a few basics which include things like:
  - regular defrosting – particularly in humid weather conditions
  - cleaning of the dust and cobwebs from the area surrounding the refrigerator to maintain good airflow and keeping the coils at the back of the refrigerator clean
  - regular temperature checks to ensure the correct temperature, a thermometer in the fridge is a good idea
  - maintaining good door seals – test using a sheet of paper – if the paper slips when the door is shut then the seals need replacing

A study of refrigerators on US farms, feedlots and other facilities found that 76% of those tested were

unsuitable for storing animal health products. Refrigerators that operate at too cold a temperature can be just as bad as those that operate at too warm a temperature, as separation of the antigen and adjuvant can occur in vaccines.

The recommended temperature range for storage of veterinary chemicals in Australia is between 2°C to 8°C.

***Never allow the storage of food or drinks in the veterinary chemicals refrigerator.***

2. **Semen storage cabinets.** Semen can deteriorate rapidly in summer even before it has left the boar so be sure your storage cabinets are working properly at the correct temperature. As for the refrigerator maintain cleanliness of the surrounding area, perform regular temperature checks and check the door seals. Optimal temperature for semen storage is 17°C.
3. **Piggery ventilation.** In hot humid weather airflow is crucial to promote cooling of pigs. Keep concrete surfaces cool by shading from the sun and ensure drippers and sprays are functioning correctly.
4. **Move and Handle pigs in the cool of the day where possible.** Perform feeding and breeding jobs early in the cooler time of day. Pigs eat less when suffering heat stress and gilts and sows will be less likely to display oestrus in the heat of the day.
5. **Take care in summer when transporting pigs.** Now is the time to review how we manage the loading and transport of pigs in hot weather. Pigs are unable to sweat, so are very susceptible to heat stress. It is an extreme welfare concern to see pigs sunburnt (and in the worse case – dead on arrival) after being trucked to the yards or abattoirs in exposed vehicles.

As a guide:

- Load pigs in accordance with stocking densities as required by the relevant Code and reduce stocking density by 5% if the temperature is 25°C or above;
- Pigs can be cooled pre-loading by spraying them with water;
- Ensure that pigs on the top deck of a vehicle are protected from the sun;
- Avoid transporting pigs in hot weather (30°C or above), where practical; load and transport early morning before the heat.
- Check pigs and vehicle within 30 minutes of commencing transport and re-check at least every 3 hours.

6. **Outdoor herds** - make sure there is adequate water available 24 hours per day and that the water is cool. Pigs will not drink hot water and pigs that are deprived of water then suddenly given water can die.

Ensure wallow areas are wet and that pigs have plenty of shade. Many outdoor farmers report higher piglet losses in summer so you need to plan your farrowing areas and hutches carefully.

Some outdoor farmers have found it best to give the sows a rest over summer although this does cause issues with your sales later on if not planned carefully.

## **MOSQUITOS AND OTHER BITEY BEASTS**

Mosquitoes and/or flies can cause considerable carcass damage to pigs in the early weeks of summer. I&I NSW has received a number of reports from producers and processors on market-age pigs that have been affected. This is due to high numbers of mosquitoes resulting from unusually heavy rain this late spring / early summer.

Mosquito bites result in large skin lesions due to type 3 hypersensitivity reactions. Many affected animals have had to be skinned at the abattoir, such has been the severity and extent of the lesions. A skin weighs on average 17 kg, so the growers lost approximately \$34 dollars in weight alone. Additionally there are often further downgrades for the whole carcass.

Very few products used to control biting insects are registered for use in pigs. These include surface sprays, “knockdown” products, and skin repellents. The surface sprays often do not provide long-lasting protection against flies, and may have to be re-applied while the pigs are in the shed. This is not ideal, due to the irritating respiratory effects of these products. “Knockdown” products (eg pyrethrin) can be sprayed into the pigs’ environment prior to slaughter, with some success.

Some preliminary data suggests that deltamethrin can be applied off-label to the pigs’ backline to reduce fly irritation and skin damage and lasts for around 15 days (Holyoake, 2004). Care is required to ensure the domestic maximum residue limit for deltamethrin in pigs (0.1mg/ml) is not exceeded.

**Off Label use of any veterinary product should be accompanied by written veterinary directions for use.**

**Seek veterinary advice if you wish to try this with your pigs.**

Reference

Holyoake, P.K. (2004) “Testing the efficacy and residual activity of deltamethrin (“Arrest Easy

Dose”) to prevent mosquito and fly bites”.  
Proceedings of the Australian Pig Veterinarians  
Conference, Melbourne, Australia

### INSPECTING GROUP HOUSED SOWS FROM THE AISLE IS A WASTE OF TIME

This is the message from Ms Fiona Kelk, a senior veterinary student studying at Charles Sturt University, Wagga Wagga.  
Fiona’s findings were the result of a 3-week research project, supported by a student bursary from Australian Pork Limited and supervised by Dr Trish Holyoake (Industry and Investment NSW), and Dr Ross Cutler (Ross Cutler and Associates).

The objective of Fiona’s project was to identify the most sensitive detection methods for identifying sick or injured pregnant sows housed in stalls and groups on a commercial farm. A second objective was to record the time taken to carry out the different observation techniques, as a guide as to the labour requirements of each.

During her 3-week study, Fiona examined over 3000 sows. For group-housed sows, she found that the highest proportion (22%) of abnormalities (mainly lameness and skin scratches from fighting) was detected when sows were inspected from within the pen and they were encouraged to stand. This compared to inspecting the sows from the aisle at non-feeding times (2%).

For stall-housed sows, it was best to inspect sows from the rear of the sow and at feeding time. Fiona’s research is timely, with the recent announcement that the pig industry will voluntarily phase out sow stalls from 2017. Sows housed in groups have a tendency to fight – particularly when they are mixed and at feeding time.

As the care of pigs is ultimately the responsibility of the piggery stockpeople, it is important that they are aware of the best way to inspect the animals in their care. Early detection and appropriate intervention of sick and/or injured sows will ensure they are given the best opportunity to stay in the herd.

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