

Pigbytes Newsletter

Issue 16, January 2013



Change in NSW DPI

Jayce Morgan

In November 2012 a decision was made by the NSW Government to restructure the way advice is provided to farmers and the rural and regional communities of NSW, through the creation of a new organisation entitled Local Land Services (LLS). There will be eleven Local Land Service areas across NSW, where possible with common landforms and land uses.

The LLS is scheduled to commence on January 1, 2014 and will bring together the Livestock Health and Pest Authority, Catchment Management Authorities and DPI advisory services. The organisation aims to have the three agencies work together to achieve better outcomes for farmers, landowners, community and industry groups.

NSW DPI through their Agricultural NSW Branch will now focus on research and development. Advisory services as have existed to date will cease to operate. This means that a number of our NSW DPI Pig industry group are affected by these changes and are now referred to as "affected officers".

One pig extension position that has been affected with the changes is that of Ian Kruger's as the Environmental Engineer (Intensive Livestock). Ian finishes up with the department the end of this month. He has established his own private consultancy 'Ian Kruger Consulting' focusing on agricultural extension, research management and intensive livestock environmental issues. We wish Ian good fortune in his new endeavour.

Ian's contacts are:

Mobile: 0401 365 488

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Greg Mills, Livestock Officer Industry Development based at Moree is also an affected officer. Greg

In this issue

Change in NSW DPI	1
Aids for decision making for the Care and Welfare of Compromised Pigs	2
Keeping Sows Cool	3
Cooling Outdoor Sows	4
Take care with Vet labels	5
Some Links of Interest	5
Pig Industry Training	6
NSW DPI Pig Industry Group	6
Victorian DPI Pig Industry Group	6
Queensland DAFF	6

has provided significant input into the development and delivery of constructive activities with the Pig Industry Group. Greg's plans are still uncertain with every good wish for his future as well.

My position has been retained as Industry Development Officer (Pigs), but it is with a heavy heart that I tell you of these developments.

Dr Amanda Lee will retain her role as Pig Health Coordinator and take on additional responsibilities within the animal biosecurity unit.

Tim Burfitt our Manager for Intensive Livestock Industry Development is also an affected officer but he is hopeful that another position may be in the offing for him in Orange.

NSW farmers have the opportunity to participate in interactive public consultation workshops that are planned for 21 locations across the state from February to April this year. For more information or to RSVP go to the website:

<http://haveyoursay.nsw.gov.au/locallandservices>

Aids for decision making for the Care and Welfare of Compromised Pigs

Jayce Morgan

With the increasing attention to animal welfare by various animal welfare groups, consumers and retailers it is important that farmers have the treatment records and management plans for the care and welfare of compromised pigs.

It is also a legal requirement that farmers have a herd health plan and the care of compromised pigs forms part of this plan. The herd health plan should be developed with consultation with your regular veterinarian.

The decisions for the appropriate mode of action and whether to treat or cull an animal can be difficult decisions to make. Sometimes it is kinder to cull an animal early but farmers or stockpersons may be reluctant to do so.

There are 2 documents that can aid in the decision making process and assist both the veterinarian and the farmer.

The first is the Land Transport of Livestock Standards and guidelines. Part A contains the General standards and guidelines and Part B contains the Species standards and guidelines.

These standards are already legislated in some states and will be soon in NSW.

Section 4 outlines the Pre-transport selection of livestock and describes the condition of animals

that are NOT fit to load. An animal is not fit for a journey if it is:

- Unable to walk on its own by bearing weight on all legs; or
- Severely emaciated; or
- Visibly dehydrated; or
- Showing visible signs of severe injury or distress; or
- Suffering from conditions that are likely to cause increased pain or distress during transport; or
- Blind in both eyes; or
- Known to be, or visually assessed to be near (within 2 weeks) parturition, as specified in the species requirements, unless time off water and journey is less than 4 hours duration to another property.

Any animal assessed to be not fit for the intended journey must only be transported under veterinary advice.

Australian Pork Limited has also produced a Fit to Load Guide with more explanation and pictures.

The second document that will be useful for the decision making process is the APL document "Care of the Compromised Pig".

Appendix 4 is extracted from the Australian Pig vets "Sick and injured Pig Guidelines for Veterinarians". Table 1 gives general guidelines for assessment or triage for the pig. Table 2 gives a guide for specific conditions

An example might help.

Last year a litter of blind piglets turned up at the saleyards. Piglets appeared to be blind in both eyes and the whole litter was affected.



Image 1: Litter of blind piglets.

These pigs are compromised because they are blind and would find it difficult competing with sighted pigs for food and water.



Image 2: Close up view of one piglet – there appears to be no eyes.

The transport code states pigs that are blind in both eyes are unfit for transport – so they should not have been sent to the yards.

If we refer to Table 1 in Appendix 4 of the Care of the Compromised Pig and begin reading the first section which refers to Category 1 disorders with an action of immediate euthanasia we see that these piglets have 2 descriptors that apply: they will never be fit to load and they have an irreversible impediment to their ability to freely access feed and/or water.

So these piglets should be euthanased. Most people would find this a difficult decision.

It is important that no person is forced to euthanase a pig but each farm should have a person or persons responsible for euthanasia of pigs on that farm. These people should be trained and competent to euthanase pigs and hold the required license for guns and/or captive bolts.

Note: License requirements for use of captive bolts differ between states.

More information on acceptable methods of euthanasia for different weight class pigs is available in Care of the Compromised Pig (Section 4 page 35).

The other action this farmer should have taken was to consult his vet to determine the cause of a whole litter of blind piglets. A check of his sows' diets would also have been in order – vitamin A deficiency would be likely and a major concern if blind piglets are the result.

Australian Pork Limited Care of the Compromised Pig: www.australianpork.com.au in the publications section.

Land Transport of Livestock Standards and Guidelines

<http://www.animalwelfarestandards.net.au/land-transport/>

Australian Pork Limited Fit to Load Guide Contact Australian Pork Phone 1800 789 099.

If you are having difficulty accessing any of these publications please contact Jayce Morgan for assistance: mob 0428 416 518 or email jayce.morgan@dpi.nsw.gov.au

Keeping Sows Cool

Trish Holyoake

It is summer and there is still plenty of hot weather ahead. It is vital that all farms have cooling systems for pigs and that they are functioning correctly.

Lactating sows are most susceptible to over-heating, with a comfortable temperature range of 16-22°C.

In a recent Australian survey undertaken by PhD student Rebecca Wilson from Charles Sturt University, only 25% of pig producers started cooling lactating sows below 25°C.

If lactating sows get even slightly hot, they will eat less and lose weight, which will reduce milk yield and piglet weaning weights.

Sows that lose excess lean body mass will most likely have a delayed return to oestrus, with accompanying reduced subsequent reproductive performance (lower litter size and farrowing rate).

Evaporative cooling is more often used to cool lactating sows in Australia. Drip coolers are very effective but they need to be managed well. Recommendations for drip cooling are presented in the table below.

	Drip cooling lactating sows
Application rate	330 ml per hour per pig
Cycle time	1 min on, 10 min off
Nozzle/dripper flow rate	3 – 3.5 litres/hr
Switch on temperature	22-24 degrees C

For summer cooling sows:

- Drippers should be positioned closely to the sow where there is slatted floor underneath.
- Outlets that are positioned too high risk the water being blown away from the sow and to

the piglets' creep areas, which end up wet and risking scours.

- If you have mesh farrowing pen floors, take particular care with managing drippers on thin sows as these are high risk for developing shoulder sores (Davies et al, 1996).
- Sows that start developing shoulder sores in lactation should be weaned as soon as possible and moved to an area with solid flooring (ideally with bedding) and treated appropriately.
- Check cool cells to ensure that the pads are 100% wet.
- Ensure that there are minimal air leaks in alleyways and rooms as these will reduce efficiency of fans.
- Clean the dust off fan louvers and check that all fans are functioning.
- In extreme heat, limit any activities that are conducted in the late afternoon. Sows will benefit from being hosed down.

Chilled Drinking Water for Lactating Sows

Sara Willis

We all know that water is important, but it is not just any water. The H₂O should be at a temperature of about 20°C to encourage lactating sows to drink and eat more during the hot summer months.

This was the temperature preferred by lactating sows in trials conducted by Sara Willis and Gary Collman at the University of Qld Gatton Campus.

Previous work had shown that in summer the water temperature in a piggery might be anywhere between 35 and 40°C. In an initial trial at Gatton, water coolers were used which produced some encouraging outcomes. But it was difficult to provide a constant temperature so in a subsequent trial, the water supply was connected to a dairy milk vat which controlled the temperature.

By providing chilled drinking water, sows significantly increased their daily water intake. Sows receiving chilled water consumed on average 38.5L/sow/day while their unchilled counterparts consumed 31.9L/sow/day.

There was also a significant effect of water temperature on daily lactation feed intake, with the sows receiving chilled water consuming more feed (an increase of 0.252kg/sow) than those receiving the unchilled water.

Sows receiving the chilled water weaned piglets with a significantly higher average weight gain (0.3285 kg/d) compared to those drinking unchilled water (0.3126 kg/d).

The chiller unit used in the trial was developed from a second hand 1600 litre milk vat and refrigerated by a new "high ambient" condensing unit with a digital thermostat control. The total cost with all fittings and refrigerant was \$5,200. Additional costs included a return line (19mm polythene pipe) and SUPA-LON insulation, bringing the total cost to \$5500.

A total cost of \$5500 for a 500 sow piggery (i.e. 85 farrowing pens) amounts to \$65/farrowing crate. An improvement of 0.7kg in piglet weaning weight is worth \$61/sow/yr and applying this just for the three month summer period is an improvement of \$7 625 , which would result in the capital costs being paid for in the first year.

Take home message

- keep incoming lines out of direct sunlight, and ensure water storage tanks are well insulated.
- monitor drinking water temperature in sheds as well as ambient air temperature
- Consider a 2nd hand milk vat - a cheap option for supplying chilled drinking water.

Cooling Outdoor Sows

Jayce Morgan

Sows housed outdoors can become severely stressed and even die in extreme heat conditions if adequate provision is not made for their comfort. Don't forget the boars either – heat stress can result in them becoming temporarily infertile.

Some things to consider include:

- Provision of shaded wallows and keep wallows well supplied with water.
- Insulation or burial of supply lines so that water temperature remains cool. Unprotected black poly pipe supply lines mean the water can be boiling and sows have no water to drink.
- Provision of insulated shelters to reduce the radiant heat from the walls and roof. If you have been caught short biscuits or bales of hay or straw tied on the roof may provide short term relief. Or use shade cloth to provide shade to the structure.
- Use a large sprinkler to wet the pigs and their shelters and the surrounding area to provide relief from the heat. You don't want to create

one large wallow but you do need to help your sows survive the conditions.

- Solid shade is preferable to dappled shade on those very hot days – move the pigs to a better area or fix the problem with shade cloth and wet the area with water.
- Consider addition of Betaine to sow diets. Betaine is a natural osmolyte and may help to alleviate some of the negative effects of heat stress. Trials with Betaine in sow diets in summer have also found reduced wean-to-oestrus interval, better piglet weight gain, more piglets from older parity sows and in general an improved reproductive performance from gilts and sows in summer.
- Also on the diet front – diets high in fibre result in a higher metabolic heat load – consider modifying diets to make them more nutrient-dense with less fibre over the summer period. Discuss with your nutritionist.

Late gestation sows and lactating sows can pose particular problems with sows farrowing in the wallows or leaving piglets in the shelter while they lay in the wallow for long periods of time.

Producers must make every effort to lessen the welfare hazards for outdoor pigs in summer.

Take care with Vet labels

Trish Holyoake

With increasing global concerns over the development of antibiotic resistance in animals and the potential impact on human health, it is essential that producers follow the directions on medicines for pigs that are prescribed by their veterinarian.

This is particularly important with the “off-label” use of veterinary medicines.

“Off-label” use is the treatment of an animal in a way that is not provided on the registered label, including a change in the species, dose rate, frequency and duration of use.

It will inevitably require a change to the withholding period and so only veterinarians can prescribe medications “off-label” for food producing animals. This includes prescription animal remedies as well as those medicines that can be purchased directly over the counter.

In addition, it is important that veterinarians do not prescribe and producers do not use an antibiotic contrary to a 'Restraint Statement' on the label. All persons, including veterinarians, must comply with

a restraint statement on a label which can be found under the 'Restraint' heading.

An example of a 'Restraint' heading is “Not for use in lactating animals”.

Producers must by law keep records of any animals they have treated to demonstrate that they have followed the vet's directions and that they have adhered to withholding periods.

This is also a requirement of APIQ[✓]® accredited farms. Adherence to withholding periods will minimize the risk of violative residues at slaughter and keep our export markets open.

We have had farms experience outbreaks of post-weaning diarrhoea due to multi-resistant *E. coli* bacteria. In this situation, the consultant veterinarian may prescribe ceftiofur off-label to treat individual sick weaners. In such a case, it is important that (1) ceftiofur is not used for any other purpose on the farm other than that directed by the veterinarian, (2) that ceftiofur is not administered orally, and (3) that all treatments are recorded.

Finally, always remember to wear gloves and/or wash your hands thoroughly after handling animals and before eating or smoking. This should minimise the risk of picking up bacteria that may pass on resistance and subsequently cause failure of medical treatments.

It is also important to remember that each state has their own regulations regarding the use of veterinary chemical products and veterinary medicines.

While most of the regulations are the same there are some differences. Search for stock medicines regulations on your state Department of Primary Industries or Department of Agriculture website.

Some Links of Interest

Jayce Morgan

The flank to flank measure of pigs can be an indicator of body weight. This may be useful if you are dosing a group individually with a veterinary product in preference to water medicating a group as it allows you to get the dose right relative to bodyweight.

http://www.pig333.com/tips_on_pigs/using-flank-to-flank-measurement-to-predict-sow-body-weight_6012/

The final PigLink seminar for 2012 was a presentation by Alison Collins on Ileitis a disease of the gut caused by *Lawsonia* bacteria. The presentation gives an excellent description of the disease, management and treatment options. Also

on this website is the archive of previous PigLink seminars - well worth a visit.

<http://www.piglink.com.au>

Pig Industry Training

Jayce Morgan

There will be a Stock Person Skill Set training course run on February 20th and 21st at Sydney University Camden Piggery.

Trainers will be Dr Trish Holyoake and Jayce Morgan.

Cost will be \$630 for the 2 days. Participants will need to organize their own travel and accommodation. There needs to be a minimum of 12 participants for the course to run.

The course aims to give participants the basic knowledge set to care for the health and welfare of pigs, understand the quality assurance aspects of pig keeping and the maintenance of a safe compliant and practical working environment.

The course is available to anyone from the complete beginner through to persons with some industry experience.

Persons with prior experience in the pig industry will be able to be assessed for competence at that course. If assessed as competent they will be eligible for a Statement of Attainment for the Stock Person Skillset for the Pig Industry.

Persons with limited or no experience with pigs will be able to get the basic knowledge for keeping a pig and will receive a statement of participation.

Further proof of competence will need to be provided from evidence of utilisation of the skills in their workplace or on their own piggery.

More information and registration

<http://www.dpi.nsw.gov.au/agriculture/profarm/courses/pork-industry-stockperson-skill-set>

or contact Jayce Morgan

jayce.morgan@dpi.nsw.gov.au

We aim to run these courses 2 to 3 times per year depending on demand and the availability of the University facilities. If the timing of this course does not suit please register your interest at the Profarm website listed above and you will be notified when another course is scheduled.

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