



# AUSTRALIAN PORK LIMITED

## Farrowing Section Standard Operating Procedures

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# TABLE OF CONTENTS

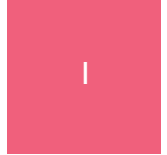


Feeding Sows	1
Pre-Farrowing Shed Checks on Sows Due to Farrow	2
Preparing Sows and Moving Them into Crates	3
Cleaning Behind Sows	4
Daily Routine	5
Farrowing	6
Savaging	7
Farrowing Fever	8
Temperature Requirements in the Farrowing House	9
Piglet's Requirements	10
Colostrum	11
Collecting Colostrum	12
Disadvantaged Piglets	13



Runts or Low Birth Weight Piglets	14
Exposed or Chilled Piglets	15
Anaemic Piglets	16
Splay-Legged Piglets	17
Litter Processing	18
Iron Supplementation	19
Teeth Clipping	20
Tail Docking	21
Ear-Notching	22
Fostering	23
Split Suckling	24
Foster Sows	25

# FEEDING SOWS



- ✓ Check that the sows ate their last feed
- ✓ Check flow rate of the drinker (2 litres/minute)
- ✓ Clean feeders out of any stale or mouldy feed before adding new feed
- ✓ Check that there are no sharp edges in feeder where sows could hurt themselves
- ✓ If sows aren't actually farrowing, make sure they get up at feeding
- ✓ Feed sows according to managements' recommendations
- ✓ Record how much feed a sow is eating each day
- ✓ To encourage sows to eat as much as possible each day, feed at least 3 times per day
- ✓ Make an effort to feed the sows at the same time every day
- ✓ Report any problems with the feed (strange smells, sows reluctance to eat) to the supervisor

# PRE-FARROWING SHED CHECKS ON SOWS DUE TO FARROW

2

- ✓ Keep check on sow condition
- ✓ Vaccination schedule for sows should be drawn up by the farm's vet
- ✓ It would be helpful if the farrowing house staff do the preliminary dry sow vaccinations so they can check incoming sows for:

## **Condition**

- Feet
- Teatline
- Vulval Damage
- Any special conditions

- ✓ Make a note of any animals that may need special attention
- ✓ Check previous farrowing histories of incoming sows for:

## **Littersize**

- Problems they had farrowing
- Mothering abilities
- Whether they savaged their piglets
- Why their piglets died

- ✓ This just prepares you for any special issues, so you're warned in advance

# PREPARING SOWS AND MOVING THEM INTO CRATES

- ✓ Before entering the farrowing shed the sows should be hosed clean and then disinfected with a mild disinfectant
- ✓ Be patient and calm when moving sows
- ✓ Talk gently and peacefully
- ✓ Do not use excessive force (such as sticks or slappers) to move sows
- ✓ Use a drafting board if you have one
- ✓ If the farrowing crate has a solid floor, place a small amount of feed on the floor to coax the sow to enter the crate
- ✓ Once the sows are in the crates set up heaters at the back of the crate to prepare for the birth of the piglets
- ✓ Place a mat/sack/piece of carpet underneath the heaters

# CLEANING BEHIND SOWS

- ✓ While sows are standing up at feeding, scrape behind them
- ✓ Dip and clean scraper in disinfectant between each crate
- ✓ Leave the crates where there are sick piglets until the very last and clean and disinfect scraper after scraping sick piglets' crate
- ✓ Clean behind the sows in an orderly sequence, starting with the sows that haven't farrowed, then the youngest piglets and finally the oldest piglets
- ✓ Clean and disinfect scraper and leave to dry after you have finished scraping
- ✓ If possible stay in the area where the new sows are farrowing until they settle down after feeding. This can help to reduce piglets being overlain

# DAILY ROUTINE

5

- ✓ Tour farrowing shed in an ordered way each day
- ✓ Check sows in order from those that have not yet farrowed to the sows with the oldest piglets (last to be checked)
- ✓ Check creep areas for dead piglets and any indication of ill-health in the piglets and sows
- ✓ **LOOK FOR THE ABNORMAL**
- ✓ Check crate floor, mesh and drain under mesh for any signs of scours
- ✓ Check area behind sows for presence of discharges
- ✓ Check all newly farrowed sows for signs of mastitis or udder congestion
- ✓ Sows that haven't farrowed should be checked for signs of milk let-down/ clear or bloody mucous discharge as they're signs of impending farrowing
- ✓ Prioritise treatments starting with the most urgent eg. chilled piglets to the least urgent eg. treating a piglet for arthritis



# FARROWING

6

- ✓ Look for signs of impending labour
  - milk let-down
  - clear/bloody mucous discharge
  - agitation
  - restlessness
  - nest-building behaviour
- ✓ Some restless sows can be settled down by giving them some sawdust/ rice hulls/bran to 'play' with and move around
- ✓ When labour starts check sow regularly to make sure labour is proceeding normally
- ✓ Average length of time between piglets should be about 10-30 minutes

- ✓ Generally, delays of more than 30-40 minutes between piglets call for action

## **Manual delivery**

- Perform a manual if the sow is in trouble during farrowing eg.
- Obviously strong contractions with no result
- Sow has bloodshot eyes
- Sow very agitated and stressed
- Piglets are born covered in foetal faeces
- Dry piglets and no afterbirth

# SAVAGING

- ✓ Usually confined to gilt litters
- ✓ Savaging can only be controlled effectively by supervising farrowing
- ✓ Piglets should be removed and placed in safe, warm place until farrowing has been completed
- ✓ Sow / gilt should be sedated if they are still not settled after farrowing is completed
- ✓ Don't give the mother too heavy a dose of the sedative as this can have a depressive effect on the unborn piglets
- ✓ Give mother a dose of oxytocin as well as the sedative can quite often slow the farrowing process
- ✓ When the mother has settled down and is calm, carefully place piglets back on sow
- ✓ She should be closely monitored to make sure she has accepted her litter

# FARROWING FEVER

8

- ✓ Symptoms may include
  - Abnormal discharges (copious creamy or bloody in colour)
  - Gross engorgement and firmness of the udder ie. touching the udder will leave “handprints”
  - Sow and udder hot to touch, udder blotchy in appearance
  - Rectal temperature is greater than 40°C
  - Sow has tendency to sit on udder
  - Sow reluctant to get up
  - Sow not eating
  - It is very difficult to draw milk from a teat

- ✓ Symptoms may vary in severity

- ✓ If you are unsure the best indicators of all are the piglets. If they .....
  - Appear hollow or if their coats are “fluffy”
  - Don’t settle down quickly to feed
  - Fight excessively at teats
  - Huddle near the teats (even if creep temperature adequate) instead of the creep area then.....

## YOU HAVE A SICK SOW

- ✓ Treat sow according to veterinary advice and provide supplementary milk drink for the piglets

# TEMPERATURE REQUIREMENTS IN THE FARROWING HOUSE



## SOWS

- 18-20°C pre/post farrowing



## PIGLETS

- 30-36°C first 48 hours
- 30-32°C rest of the first week
- 28-30°C second week
- 26-28°C third week
- 24-26°C fourth week



Piglets are very good indicators of the temperature of their creep area



If piglets are spread out well away from the heat source

- they're too hot



If they're huddled in a pile directly under the heat source, or next to or on top of the sow

- they're too cold



Adjust heater height accordingly



Also when piglets huddle next to or on top of the sow this can also mean they're sick

- check crate surrounds and piglets carefully for signs of ill-health

# PIGLET'S REQUIREMENTS

10



Newborn piglets have two main requirements that must be met very soon after birth

## **WARMTH and COLOSTRUM**

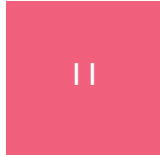
### **WARMTH**

- Temperature needs of piglets and sows differ dramatically (see **TEMPERATURE REQUIREMENTS IN THE FARROWING SHED**)
- Newborn piglets have very little stored energy reserves
- If their thermal requirements are not met, their energy reserves will be mobilised rapidly
- Chilled piglets cannot compete for teats, suckle properly, are more susceptible to infections and can't get out of the sow's way quickly enough

### **COLOSTRUM**

- Colostrum is essential for piglet survival
- Colostrum is rich in energy and immunoglobulins which transfer immunity from sow to piglet
- Immunoglobulins are very large compounds that can only be absorbed properly for about the first 24 hours after birth
- Piglets cannot survive without colostrum
- Disadvantaged piglets should receive supplementary colostrum

# COLLECTING COLOSTRUM



- ✓ Colostrum can be collected from the sows during farrowing
- ✓ Wash and clean sow's udder & your hands
- ✓ Have two cleaned and sterilised wide mouthed containers prepared (one to milk into, and one to place collected colostrum)
- ✓ Try to choose a sow with large well-formed teats
- ✓ Try not to choose gilts
- ✓ The colostrum should flow easily during farrowing. If not administer 0.5 ml of oxytocin to the sow
- ✓ Gently massage the udder, then gently draw milk (be careful as you can cause bruising) from the teats into a sterile container
- ✓ Colostrum can be frozen for long term storage and then re-heated gently
- ✓ Target intake for sow colostrum should be about 15-20ml
- ✓ Cleanliness and hygiene is important all the time
- ✓ Keep all utensils used for feeding piglets very clean and stored in a sealed container

# DISADVANTAGED PIGLETS

12

- ✓ Disadvantaged piglets have to have extra special care and attention if they're going to survive
- ✓ General requirements include warmth, colostrum and safety from being overlain by the sow
- ✓ Disadvantaged piglets include
  - Runts or low birth weight piglets
  - Piglets born towards the end of a long farrowing
  - Piglets from a large litter
  - Exposed/chilled piglets
  - Anaemic piglets
  - Splay-legged piglets
- ✓ Tube-feed piglets 10-15 ml of colostrum every 60-90 minutes
  - Hold piglet with your hand around the back of its ears and use your thumb to hold its mouth open
  - Carefully insert the tube (moisten the end), twirling it as you push it in
  - Try to follow down the roof of the mouth to avoid putting the tube in the windpipe (you'll know if the tube does go into the windpipe because it will only go in a short way). If this happens pull the tube out gently and try again.
  - Depress the plunger of the syringe slowly, and when empty, pull the tube out gently

# RUNTS or LOW BIRTH WEIGHT PIGLETS

13

- Piglets under 800 gm
- Put piglets in a safe warm place where they are not in any danger from a sow
- Tube feed piglets regularly (See DISADVANTAGED PIGLETS)
- If the piglet is very small, leave in the protected warm area (a crib is ideal) overnight before returning to the sow



# PIGLETS BORN TOWARDS THE END OF A LONG FARROWING

- ✓ Quite often these piglets are quite lethargic and slow to start feeding
- ✓ Remove these piglets from the farrowing crate and place in a warm, protected place.
- ✓ Tube feed regularly (See DISADVANTAGED PIGLETS)
- ✓ If they respond well to the treatment and seem strong enough, they can be returned back to the sow after 2-3 doses

# EXPOSED OR CHILLED PIGLETS

15

- ✓ Very easily recognisable, usually found well away from the heat source, eyes are glassy and staring, they may even appear dead
- ✓ These piglets must be treated immediately
- ✓ Give the piglets energy through tube feeding them colostrum and then warm them up
- ✓ Support the piglets in a warm bath until they start moving freely
- ✓ Dry piglet thoroughly and place in warm safe place
- ✓ Tube feed regularly (See DISADVANTAGED PIGLETS)
- ✓ If they respond well to the treatment and seem strong enough, they can be returned back to the sow after 2-3 doses

# ANAEMIC PIGLETS

- ✓ Also known as “bleeders”
- ✓ If cord is still bleeding use a cord clamp
- ✓ Initially, give piglets a dose of oral iron then give them an injectable dose at 3 days of age
- ✓ Delay tail docking of anaemic piglets until the piglets are a few days of age
- ✓ If piglets are very weak they should be placed in a warm safe place and fed supplementary colostrum until they are strong enough to go back to their mother

# SPLAY -LEGGED PIGLETS

- ✓ Tape the piglet's back legs a little bit more than the piglet's hip width apart
- ✓ If piglet has severely splayed in both front and back legs it may be necessary to make a harness or use commercially available harnesses
- ✓ After you've finished taping the piglet's legs, place piglet in safe, warm place and tube feed it colostrum (See DISADVANTAGED PIGLETS)
- ✓ It can also help if a piece of carpet or thick sack is placed on the floor of the crib. This helps the piglet's feet to grip and it helps muscle development

**Always respond to the needs of those individual piglets requiring special attention first. After their needs are met then you can proceed to litter processing (iron injections, teeth clipping and tail docking) and fostering**

# LITTER PROCESSING

- ✓ The various litter processes can include
  - iron injections,
  - teeth clipping,
  - ear notching,
  - tail docking
- ✓ It is extremely important to follow high levels of hygiene during litter processing
- ✓ When instruments are in use they should be kept in clean disinfectant solution which should be changed between litters or groups of piglets
- ✓ Use a fresh, sterile needle every litter
- ✓ Dispose of needles in containers designed for that specific purpose
- ✓ All instruments used should be scrubbed clean and boiled daily in clean water for 10 minutes after use

# IRON SUPPLEMENTATION

- Sow's milk contains very little iron
- Piglets are born with low iron reserves, so they need supplementary iron to prevent anaemia
- Each piglet requires 200mg of iron either by injection into the neck muscle (behind the ear) or by oral dosing

# TEETH CLIPPING

20

- ✓ Piglets are born with eight needle teeth
- ✓ In some herds, clipping or grinding of the needle teeth helps prevent piglets hurting each other or the sow when they're establishing teat order in the first couple of days after birth
- ✓ Teeth can be cut or ground just above the gum line or about half the tooth can be left
- ✓ Be careful not to cut the gum or shatter the tooth in the gum, as this be very painful and can easily lead to infection

# TAIL DOCKING

- Usually carried out soon after birth to prevent tail biting problems post-weaning
- Should leave only about a 1.5-2cm tail stub
- Buffered iodine or a disinfectant can be applied to the tail stub to help prevent bacterial infections



# EAR-NOTCHING

- If ear-notching is used on farm it is usually carried out to individually identify piglets or litters
- Many different earmarking systems are available

# FOSTERING

- ✓ The major reason for fostering is to improve a piglet's chances of getting adequate nourishment and thriving
- ✓ Work out a system that provides the best results and suits your farm situation the most
- ✓ Fostering should be carried out in the first 24 hours of a piglet's life
- ✓ Main types of fostering
  - To even up litter sizes - e.g. 2 sows farrow with 16 and 8 piglets respectively. As long as both sows have sufficient functional teats move piglets from the litter with 16 piglets and place with the litter with 8 piglets ensuring all piglets have access to a functional teat
  - Back fostering to create nurse sows. Litter size is large eg. 4 sows farrow for 58 piglets born alive. Wean an extra litter and move other litters “back” down the line until you have an “empty” sow that farrowed 2-3 days previously. Make sure that the piglets you place on this sow have had their full requirement of colostrum and try to put the biggest piglets possible onto that sow.

# SPLIT SUCKLING

- ✓ Used when a sow has had a large litter and you haven't any other sows to try and place the piglets to give them all a drink
- ✓ Also used to ensure that all piglets in a large litter will drink sufficient colostrum
- ✓ Large new-born litter is split into 2 groups
  - Small group of the biggest piglets (placed in a safe, warm place eg.crib)
  - Large group of the smaller piglets (left on the sow all or most of the time)
- ✓ For example a sow has given birth to a litter of 16 piglets, which are split into 2 groups of 10 (smallest piglets) and 6 piglets (largest piglets)
  - Group of 10 piglets on the sow as much as possible
  - If the split suckling has to occur for a while swap the two groups around but try to leave the very smallest piglets on the sow all the time
- ✓ Follow this routine until you can organise all piglets on a permanent mother

# FOSTER SOWS

- ✓ Try to pick a younger sow that has at least 14 small but well-formed functional teats
- ✓ Quite often a gilt will make the best foster mother if you have very small piglets that need fostering
- ✓ Young- preferably parity one to three
- ✓ Check foster sow teat accessibility when the sow is lying down
- ✓ Leave fostering until late morning or no later than early afternoon after sows have settled down from the morning routine (this also gives you enough time to make sure sows have accepted the new piglets before you finish work for the day)
- ✓ Foster sow should be well natured (calm, responds well to humans, does not have a history of savaging or overlaying piglets)
- ✓ Foster sow should be in good body condition

- ✓ The foster sow should have looked/is looking after her piglets very well
- ✓ Sometimes foster sows will not take their piglets willingly and you may have to calm and soothe them into accepting their new piglets
- ✓ Some techniques which can work to soothe a stubborn sow include:
  - Give her special feed/mash (mixing it with stale beer works well)
  - Give her bran of sawdust to “play” with
  - Spray her snout, her piglets and fosters with strong smelling air freshener
  - If she’s just farrowed, rub her afterbirth over the piglets you want to foster onto her and lock her own piglets and the fosters up together for at least 20 minutes or so
  - If there’s no afterbirth spray her piglets, the fostered piglets and lock her own piglets and the fosters up. Just before you put the piglets back, spray around her nose with the same air freshener
  - If she is really upset, sedate her
  - Leave fostering until late morning or early afternoon when the sows have settled down

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