

Assessment protocol for pigs

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Animal Welfare: From cure to prevention Belgrade, 24 March - 25 March 2010

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Scope



	Rearing	Producing	End of life
Sows and	Piglets	Sows	
piglets			
Growing and			
finishing pigs			



Included in pigs protocol Not included in pigs protocol

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Sources of information

Measurements

Information



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Scope

- The protocols are applicable in a wide range of animal units, be they extensive or intensive.

- However, there are some measures which cannot be taken on sows that are housed in stalls. This housing system is not common anymore and will be banned from 1 January 2013 on for the major part of the pregnancy period or the full pregnancy period.

Legal aspects

- The protocols should only be applied to farming systems which operate within the applicable legal framework of the country.

-The protocols do not replace or supersede any existing farm assurance or legal standards.

-They provide an additional tool for the assessment of animal welfare using predominantly animal-based measures and as such can add valuable additional information to existing inspection programs.

5.1 Collection of data for sows and piglets on farm

	Welfare Criteria	Measures
Good feeding	1 Absence of prolonged hunger	Sows: Body condition score
		Piglets: Age of weaning
	2 Absence of prolonged thirst	Sows and piglets: Water supply
Good housing	3 Comfort around resting	Sows: Bursitis, shoulder sores
		Sows and Piglets: Absence of manure
		on the body
	4 Thermal comfort	Sows and Piglets: Panting, huddling
	5 Ease of movement	Sows: Space allowance, farrowing crates
Good health	6 Absence of injuries	Sows and piglets: Lameness
		Sows: Wounds on body, vulva lesions
	7 Absence of disease	Sows and piglets: Mortality, coughing,
		sneezing, pumping, rectal prolapse,
		scouring
		Sows: Constipation, metritis, mastitis,
		uterine prolapse, skin condition,
		ruptures and hernias, local infections
		Piglets: Neurological disorders, splay leg
	8 Absence of pain induced	Sows: Nose ringing and tail docking
	management procedures	Piglets: Castration, tail docking and
		teeth clipping
Appropriate behaviour	9 Expression of social behaviours	Sows: Social behaviour
	10 Expression of other behaviours	Sows: Stereotypies, exploratory behaviour
	11 Good human-animal relationship	Sows: Fear of humans
	12 Positive emotional state	Sows and piglets: Qualitative Behaviour
		Assessment (OBA)

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6.1A Collection of data for growing pigs on farm (measured on farm)

	Welfare Criteria	Measures
Good feeding	1 Absence of prolonged hunger	Body condition score
	2 Absence of prolonged thirst	Water supply
Good housing	3 Comfort around resting	Bursitis, absence of manure on the body
	4 Thermal comfort	Shivering, panting, huddling
	5 Ease of movement	Space allowance
Good health	6 Absence of injuries	Lameness, wounds on body, tail biting
	7 Absence of disease	Mortality, coughing, sneezing, pumping, twisted snouts, rectal prolapse, scouring, skin condition, ruptures and hernias
	8 Absence of pain induced by management procedures	Castration, tail docking
Appropriate behaviour	9 Expression of social behaviours	Social behaviour
	10 Expression of other behaviours	Exploratory behaviour
	11 Good human-animal relationship	Fear of humans
	12 Positive emotional state	Qualitative behaviour assessment (QBA)



Animal-based measures

Sows:

 - 30 pregnant sows (early, mid- & late pregnancy) Growing pigs:

150 of 10 pens / farm

- 10 lactating sows and their litters





Body Condition in Sows

I. What to assess

- Condition score is essentially a measure of the amount of subcutaneous fat that the sow has covering her bones
- Condition scoring aims to give guidelines on how to achieve adequate nutrition that minimises the risk of welfare problems in the sow

Body Condition in Sows

When to assess it

• Condition scoring should be carried out at 3 different stages:

- *mid-gestation*: assessing now means that there is still time for any required changes in condition to be achieved before farrowing

- *in late gestation* (shortly prior to farrowing): although it will be too late to change the condition of the sows if they are not on target, it is an important measure for future reference

- *around the time of weaning*: this is when the sow is likely to be in poorest condition because of the demands of the piglets

Body Condition in Sows

On-farm assessment:

- Ensure that the sow is standing up, then view from behind and whilst standing alongside her
- Look at the spine, hip and pin bones, considering how visible they are. Palpate the sow over these regions if possible, as visual assessment alone can be deceptive

Body Condition in Sows

On-farm assessment:

• Assess each sow according to the following:

 $\mathbf{0}$ – the hip and backbones are not visible, but the sow is not obese (score 3-4 on the CSS)

1 - the sow appears visually obese (score 5 on the CSS) or the sow appears visually thin (score 2 on the CSS). This should be confirmed by attempting to feel the hip and back bones by pushing down with a single finger (not possible if CSS score 5), or by laying the flat of the hand on the animal without pressure (can feel bones if CSS score 2)

2- the sow appears visually very thin (score 1 on the CSS). The hips and backbone are very prominent

Body condition score

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Animals with visible spine, hip and pin bones will be scored as lean pigs.

Individual level:

- 0 Animal with a good body condition
- 2 Lean animals

Herd level:

Percentage of lean pigs with poor condition (i.e. score 2)

Age of weaning

Method description

The animal unit manager is asked about weaning management of the piglets (the average age of weaning is recorded).

This can be corroborated by the assessor during the course of the visit while assessing ten litters of different ages which are sampled for a variety of different animal-based measures; during this time the assessor may notice if weaning age is significantly different to that stated by the animal unit manager (because there may be a lack of older piglets).

Classification

Average age of weaning in days

2. Absence of prolonged thirst

Water supply (sows)

- The number of drinking places
- The functioning of the drinkers
- The cleanliness of drinkers: drinkers will be considered hygienic when without faeces and without mould

Classification Group level: Number of drinking places and Functioning of drinkers 0 – The drinkers function correctly 2 – The drinker don't function properly and Cleanliness of drinkers 0 – Clean

2 – Dirty

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Water supply (sows)

- The number of drinking places
- The functioning of the drinkers
- The cleanliness of drinkers: drinkers will be considered hygienic when without faeces and without mould

The assessor will record the type of drinker (pipe, bowl or trough), and (when possible) also its length, width, height, cleanliness and whether the drinkers are functioning (or not) will be considered. In addition, the risk of injuries due to drinkers will be checked.

Classification

- 0 Water facilities are adequate
- 2 Water facilities are inadequate

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<u>Bursitis</u>

- 0 no evidence of bursae,
- 1 one or several small bursae on the same leg (1.5 2 cm diameter) or one large bursa (3.0 5.0 cm diameter)
- 2 several large bursae, or one extremely large bursa (≥ 7 cm diameter), or any bursa that is eroded

Shoulder sores (sows in stalls)

Method description

Make sure all sows to be scored are standing up and score sows in different stages of lactation. Stand less than 1 meter away from the observed sow.

To assess shoulder lesions both shoulders should be visually examined.

Classification

Individual level:

0 - No evidence of a shoulder lesion

1 – Evidence of an old injury (scar tissue formed), or a recent injury which is healing, or reddening of the area without penetration of the tissue

2 – An open wound/lesion



Sows

• Pressure lesions on the shoulders of sows are also indicators of reduced resting comfort



Manure on the body

The presence of manure/faeces on the body should be visually assessed on one side of the body.

- Sows to be scored are standing up.
- Visually assessed on one side of the body.
- Choose the side with the optimal view

Note that this parameter should not be confused with dirtiness- an outdoor pig soiled with mud is perfectly normal, and does not necessarily indicate a welfare problem.

Manure on the body

Sows/individal level

- 0 Up to 10% of the body surface is soiled
- 1 10% to 30% of the body surface is soiled
- 2 More thant 30% of the body surface is soiled

Piglets/group level:

0 – No pigs in the litter with soiled body surface

1 – Up to 50% of piglets in the litter have a soiled body surface

2 – More than 50% of piglets in the litter have a soiled body surface

- Shivering (<u>1) (2</u>):

Method description

- Best observed in resting animals
- Wait a moment to allow animals to settle when first entering the room.
- The assessor should stay outside the pen.
- Shivering is defined as the slow and irregular vibration of any body part, or of the body as a whole.

Classification Group level:

- 0 No pigs in the pen/group are observed shivering
- 1 Up to 20% of pigs in the pen are observed shivering
- 2 More than 20% of pigs in the pen are observed shivering

- Huddling:

- Only observed in resting animals
- Wait a moment to allow animals to settle.
- The assessor must stay outside the pen.

Huddling: when a pig is lying with more than half of its body in contact with another pig (i.e. virtually lying on top of another pig). It is not considered huddling when an individual is just side by side with another animal.

The proportion of animals showing the behaviour in relation to the number of resting pigs (hence not in relation to the total animals of the pen/group).



- Huddling:

Sows/individual level:

- 0 No huddling
- 2 Huddling

Piglets/group level:

- 0 No huddling behaviour observed
- 1 Up to 20% of resting piglets in the litter display huddling behaviour
- 2 More than 20% of resting piglets in the litter display huddling behaviour

- Panting

- Best observed in resting animals
- Wait a moment to allow animals to settle when first entering the room.
- The assessor must stay outside the pen.

Panting is breathing rapidly in short gasps carried out with the mouth.

Sows/individual level:

- 0 No panting
- 2 Evidence of panting

Group level:

- 0 No pigs in the pen/group observed are panting
- 1 Up to 20% of pigs in the pen observed are panting
- 2 More than 20% of pigs in the pen observed are panting



Space allowance

- The same pens/area where the groups of animals are assessed for health measures

-A sub sample of pens for both pregnant and lactating sows is selected.

-The number of animals in each pen and the dimensions of the pen are recorded.

-Space allowance is calculated as the area provided to animals divided by the number of animals multiplied by their weight.

Classification **m2/sow**

Farrowing crates

Method description

The crate size is considered adequate when the sows have comfortable space for both standing and lying down.

Classification **Sows/individual level:**

- 0 Crate is adequate for the size of the sow
- 2 Crate is inadequate for the size of the sow

Lameness

- Is the inability to use one or more limbs in a normal manner.

- It can vary in severity from reduced mobility or inability to bear weight, to total recumbency.

Method description

- The assessor must assess the pig walking.
- Ensure that the pig has walked a certain distance before starting the assessment.
- Have a clear and unobstructed view of the moving animal.
- The sows are observed from the front, side and back, whilst ensuring that the assessor can approach to not further than 4 meters away.

Lameness

Sows: Individual level:

0 – Normal gait or difficulty in walking, but still using all legs; swagger of caudal body while walking; shortened stride

- 1 Severely lame, minimum weight-bearing on the affected limb
- 2 No weight-bearing on the affected limb, or not able to walk

Piglets/group level:

0 – All piglets in the litter have a normal gait

1 – One piglet in the litter displays moderate lameness (difficulty in walking but still using all of its limbs)

2 – More than 1 piglet in the litter displays moderate lameness, or at least 1 piglet in the litter displays severe lameness (minimum weight bearing on the affected limb; no weight bearing on the affected limb; unable to walk)



Wounds on body

-The assessor shall maintain a distance of approximately 0.5 m from the animal at all times.

-Wounds on the body are visually assessed by inspecting one side of the sow's body.

-Choose the side with the optimal view for observation.

Wounds on body (sows)

Superficial scratches: lesions (surface penetration of the epidermis)

Wounds: penetration of the muscle tissue.

Where scabs have formed, they will count as a single lesion if they form a continuous line.



Wounds on body (sows)

Each zone will be considered separately according to this standardization:

- 4 or less scratches up to 5 cm in length will be considered as 1 lesion
- 2 parallel scratches with up to 0.5 cm space between them will be considered as 1 lesion
- Scratches that are bleeding will be considered as 1 lesion
- A small wound (less than 2 cm) will be considered as 1 lesion,
- A bleeding wound between 2 and 5 cm, or a healed wound more than 5 cm will be considered as 5 lesions.

•A deep and open wound of 5 cm or more in length is given a score of 16.

Wounds on body (sows)

Individual sub-level:

a – No visible skin injuries, or up to 4 lesions visible

- b-5 to 10 lesions visible
- c More than 10 lesions visible

Classification Individual level:

0 - All body regions with an individual score 'a'

1 – Any body region with an individual score 'b' and/or a maximum of 1 body region with an individual score 'c'

2 – Two or more body regions with an individual score 'c', or any body region with an individual score 'c' that has 15 or more lesions in the region

Wounds on body (growing)

Each zone will be considered separately according to this standardization:

- A group of small scratches will be considered 1 lesion.
- 2 parallel scratches with up to 0.5 cm space between them will be considered as 1 lesion.
- A scratch higher than 2 cm will be considered 1 lesion.
- A round lesion smaller than 2 cm will be considered 1 lesion.
- A round lesion from 2 to 5 cm of diameter or more than 5 cm and healed will be considered as 5 lesions
- A round lesion of more than 5 cm, deep and opened will be considered as a cumulative score of 16 lesions.

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Wounds on body (growing)

- 0 -If all regions of its body have up to 4 lesions
- 1 When from 5 to 10 lesions are observed on up to 5 zones of the animal or one zone has from 11 to 15 lesions
- 2 When more than 10 lesions are observed on at least two zones of the body or if any zone has more than 15 lesions

Vulva lesions

0 – No damage to the vulva, or small lesions (less than 2 cm), or scar tissue visible

1 – Injury larger than 2 cm visible, but in the process of healing (scab or crust formed), or a deformed vulva

2 – Any injury larger than 2 cm that is bleeding

Tail biting (growing)

- a No evidence of tail biting
- b Indication of superficial biting along the length of the tail, but no evidence of fresh blood or of any swelling (red areas on the tail are not considered as wounds unless associated with fresh blood)
- c Fresh blood is visible on the tail; there is evidence of some

Mortality

-'Uncontrolled' death of animals (as distinct from culling/euthanasia).

-The animals may die from for example- septicaemia, respiratory disease, acute infection or dehydration.

-The animal unit manager is asked about mortality management on the farm based on data collected from farm records. Number of animals placed in house from previous animal unit (A) Total

number of animals which died and were found dead (but were not actively culled) during the last 12 months (M)

Calculate the percentage mortality using the following equation: Percentage of mortality = $(M/A) \times 100$ during the last 12 months

Health measure

Coughing ,sneezing

-at a total of 6 points of observation points from each point of observation at least two pens (20-40 animals).

- Average frequency of coughing and sneezing per animals over 5 minutes

-The total number of pigs observed (in the group or in the pen) will be considered.

- The number of coughs occurring in five minutes is recorded.

•Pumping

- •Twisted snouts
- •Rectal prolapse (enteric disorders)
- •Scouring (enteric disorders)
- Skin condition
- •Ruptures and hernias

7. Absence of pain induced by management procedures

Castration (mutilations)

Method description

The animal unit manager is asked about mutilation management with regard to castration (what proportions of pigs are castrated). Furthermore ask whether anaesthetics are used during the procedure.

Classification **0 – No castration**

- 1 Castration with use of anaesthetics
- **2 Castration without use of anaesthetics**

7. Absence of pain induced by management procedures

Tail docking (mutilations)

Method description

The animal unit manager is asked about mutilation management with regard to tail docking (what proportions of pigs are tail docked).

Furthermore ask whether

anaesthetics are used during the procedure.

Classification **0 – No tail docking**

- 1 Tail docking with use of anaesthetics
- 2 Tail docking without use of anaesthetics



Behaviour

-Observations should take place in the morning when the animals are more active.

-If animals are not fed ad libitum, observations are made outside the feeding period, at least one hour after the morning meal.

-Before starting the assessment:

- Enter the room
- Record the number of animals per pen/group
- Ensure that all the animals are standing up.
- 5 10 minutes later make the observations from the passageway.

9. And 10. Expression of behaviours



STEREOTYPIES

-Sequence of invariant motor acts, which provide no obvious gain or purpose for the animal.

- Sham chewing
- Tongue rolling
- -Teeth grinding
- Bar/trough/drinker biting
- Floor licking



STEREOTYPIES

- Each sow will be observed for 15 s.
- If, after 15s the assessor is unsure, increase the length of the observation period to 1 min.
- In groups containing more than 10 sows, enter the pen and identify (mark) the sub-sample of sows that will be assessed with stock marker spray.
- Eight minutes later, mark another batch of sows as before. Assess the first batch, then the second batch, and if necessary mark a third batch and so on.

- 0 No stereotyped behaviour observed
- 2 Stereotyped behaviour observed

11. Good human-animal relationship

Fear of humans-HAR (Sows)

-Before starting the measure, walk up and down in front of the sows alerting them to the presence of the assessor.

- Since sows may be housed in stalls or in groups, two different approaches are required.

HAR Sows in stalls

-The sows should be standing up.

-The measure is comprised of three individual stages;

Stage 1: Select the sow and move to the 'start' position (0.5 m) and slightly to the right hand side of the sow. Remain there for 10s. If the sow does not react proceed to stage 2.

Stage 2: Slowly move from the 'start' position towards the sow in a diagonal direction, looking at the sow without staring. Once at the head end of the sow, crouch down in front of her and remain motionless for 10s. If the sow does not react proceed to stage 3.

Stage 3: Reach out and attempt to touch the sow between the ears for 10s.

HAR Sows in group

Stage 1: Enter the pen and walk slowly and steadily around the perimeter of the pen. Then move to the 'start' position (0.5m) away from the sow and remain motionless for 10s. If the sow does not react proceed to stage 2.

Stage 2: Slowly and steadily approach the head end of the sow, then crouch down and remain motionless for 10s. If the sow does not react proceed to stage 3.

Stage 3: Reach out and attempt to touch the sow between the ears and maintain contact for 10s.

Fear of humans-HAR (Sows)

Classification:

0 – The sow allows the assessor to touch her between the ears without any withdrawal response, or the sow withdraws when it is attempted to touch her between the ears but then approaches

1 – The sow withdraws initially but then approaches when the assessor is at the start stage or when the assessor is crouched down in front of the sow (stage 1 and 2), or when the assessor attempts to touch the sow between the ears, she withdraws and stays withdrawn (stage 3)

2 - The sow withdraws when the assessor is at the start position, or the sow withdraws and remains withdrawn when the assessor crouches down in front of her



Fear of humans (growing pigs)

- Whether the animals show a panic response towards humans or not.

- Panic is defined as animals fleeing, or facing away from the assessor or huddling in the corner of the pen.

- Firstly, the assessor should enter the pen, or stand next to the group of animals in extensive conditions, and then walk around the group very slowly.

- Then, the assessor arrives at the starting point and must stop and wait for 30 seconds.

-After 30 s the assessor must change direction and walk around the pen/group of animals very slowly, considering the response of the animals to this second contact.

-When walking through the group the assessor shall not initiate any physical interactions or talk to the animals. Limited physical contact may occur during walking, such as a gentle touch when pigs are ahead of the assessor and therefore very close.

11. Good human-animal relationship



(QBA) considers the expressive quality of how animals behave and interact with each other and the environment i.e. their 'body language'.

Select between one and eight observation points (depending on the size and structure of the farm) that together cover the different areas of the farm.

Decide the order to visit these observation points, wait a few minutes to allow the animals to return to undisturbed behaviour.

Watch the animals that can be seen well from that point and observe the expressive quality of their activity at group level. It is likely that the animals will initially be disturbed, but their response to this can be included in the assessment.



Total observation time shall not exceed 20 minutes, and so the time taken at each observation point depends on the number of points selected for a farm:

Number of observation points	1	2	3	4	5	6	7	8
Duration of observation per	10	10	6.5	5	4	3-5	3	2.5
observation point in minutes								

The terms used for QBA growing pig assessment are:

- Active.
- Relaxed
- Fearful
- Calm
- Happy

- Tense
- Enjoying
- Frustrated
 Lively

- Distressed

- Positively occupied
- Listless
- Agitated
 Sociable
 Indifferent
 - Bored Irritable
- Content
 Playful
 Aimless

When observation at all selected points has been completed, find a quiet spot and score the 20 descriptors using the visual analogue scale (VAS).

Scoring is not done during observation, and that only one integrative assessment is made per farm.





- -To score each term, draw a line across the 125 mm scale at the appropriate point.
- The measure for that term is the distance in millimetres from the minimum point to the point where the line crosses the scale. Do not skip any term.
- -Left 'minimum' and right 'maximum' point.
- -'Minimum': the expressive quality indicated by the term is entirely absent in any of the animals you have seen.
- -'Maximum': the expressive quality is dominant across all observed animals.
- -It is possible to give more than one term a maximum score; animals could for example be both entirely calm and content.



2 to 8 point of

Active	Min.	Max.
Relaxed	Min.	Max.
Fearful	Min.	Max.
Agitated	Min.	Max.
Calm	Min.	Max.
Content	Min.	Max.
Tense	Min.	Max.
Enjoying	Min.	Max.
Frustrated	Min.	Max.
Bored	Min.	Max.

12. Positive emotional state

<u>Qualitati</u>	ve behaviour assessment	<u>(1) (2) (3) (4)</u>	4 points
Playfull	Min.		Max.
Positively	Min.		Max.
Occupied Listless	Min.		Max.
Lively	Min.		Max.
Indifferent	Min.		Max.
Irritable	Min.		Max.
Aimless	Min.		Max.
Нарру	Min.		Max.
Distressed	Min.		Max.
Sociable	Min.		Max.

- 1. Farmer interview (management-based measures)
- 2. Animal-based measures
- 3. Resource-based measures

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Welfare assessment

1 Farmer interview (management-based measures)

Overview of the protocol Health management Hygiene management Record keeping Mutilation routine Euthanasia criteria



Welfare assessment (sows)

2. Animal-based measures:

- Qualitative behaviour assessment
- Human-animal relationship
- Clinical measures
- Health measures
- Thermoregulatory measures
- Behaviour (social, exploratory)

Welfare assessment (growing pigs)

2. Animal-based measures:

Outside the pen:

- Qualitative behaviour assessment
- Respiratory problems (coughing, sneezing)
- Behaviour (social, exploratory)
- Thermoregulatory measures

Inside the pen:

- Human-animal relationship
- Clinical measures, health measures, lameness, bursitis

information collected	No. of pregnant	No. of lactating	No. of litters	Time required
	sows to sample	sows to sample	to sample	
Management-based measures *	-	-	-	25 minutes
Qualitative behaviour assessment (QBA)				20 minutes
Fear of humans	20 ^E L	-	-	30 minutes
Clinical measures:				150 minutes
Wounds on body	30 r.m.r.	10 ×		
Vulva lesions	30 MJL	10 ×	-	
Body condition score	30 MIL	10 *		
Health measures:				
Coughing	30 r.m.r	10	10×	
Sneezing	30 r.m.r.	10	10 ×	
Pumping	30 riwit	10	10 ×	
Rectal prolapse	30 r.m.r.	10	10 ×	
Scouring	30	10	10	
Constipation		10	-	
Absence of manure on the body	30 cmt	10	10×	
Mastitis		10		
Metritis	30 s	10 %	-	
Uterine prolapse		10 12		
Lameness	30 r.wit	-	10 x	
Skin condition	30	10	_	
Ruptures and hemias	30	10	-	
Local infections	30	10		
Neurological disorders	-	-	10 ×	
Splay leg		-	10 x	
Bursitis	30	10	_	
Shoulder sores	-	10 wr	_	
Huddling	30	10	10 ×	35 minutes
Panting	30	10	10 ×	
Behaviour:				
Stereotypies	40 °.M.L	_		20 minutes
Social behaviour 1	-	_	-	20 minutes
Exploratory behaviour 1	_	_	_	
Resource-based measures 2	-	-	-	30 minutes
	Total time			330 minutes
				(5.5 hours)

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Selecting sows for assessment

• 30 sows, 10 in each of the three stages of pregnancy (early, mid- and late gestation), that can be used for the majority of the measures.

• HAR: the sows of early and late gestation.

• **Stereotypies**: The 30 sows selected + 3 sows in both early and late gestation + 4 sows in mid-gestation.

• **Metritis** is to be assessed in sows around the time of service and at farrowing (15 sows at each point);

Selecting sows for assessment

• **Behaviour** : the total number of pens to be recorded will depend on the group size in each pen:

- < 15 sows: 4 pens,
- > 40 sows: 1 pen,
- 14-40: 2 pens.

If sows are housed in a large group where it is not possible to view every sow, the number of animals that are observed shall be estimated.

Selecting sows for assessment

Stereotype :

- Small groups (10 pigs or less), it is not necessary to mark the sows.

- The proportion of sows in first gestation shall not exceed 20% of the total number sampled.

- Where sows are housed in groups, a minimum of two pens must be observed.

- In small stable groups (< 10 sows), all of the animals must be observed.

-Where sows are housed in stalls, approximately equal numbers of sows in each of the three stages of pregnancy should be assessed.

Selecting sows in pens

- ≤ 6 sows of similar stage per pen: all the sows
- ≥ 6 sows of similar stages per pen: sample a representative number of sows from the different pens (eg, five sows from each pen).
- -≥ 100 sows of similar stages: Select sows randomly, enter the pen and select the first sow in sight as the 'starting sow'.

Then move to the sow who's head is the fourth away (facing) from the 'starting sow'.

Continue in this manner until all the necessary sows have been sampled.

- In large groups with animals of different stages, the selection of sows must be completely random, using the randomized sampling strategy described above.



Distribution of pens:

Where animals at the same stage are housed in different buildings, ensure that animals in all of the different types of buildings have been sampled.

Guidelines for visit to the animal unit

Bio-security

-Ensure that there was no previous contact between pigs and assessor for at least 48 hours prior to assessment

Equipment required

- Appropriate disposable clothing and footwear (should the farm not provide any)
- Recording sheets, clipboard and a supply of writing materials
- Head-torch
- Stopwatch
- Stock marker spray
- Knapsack sprayer containing disinfectant
- Buckets and disinfectant for boots
- Thermometer
- Device to measure distances



Commencing the visit

- Find the animal unit manager and introduce him/herself.
- Give a brief explanation of what is about to be done during the course of the visit.
- Make a brief sketch of the building for personal records.
- Explain how long these will take to complete, and that his/her assistance will be required when assessing the management,-and resource-based measures.

Thank you for your attention

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