Thank you for participating in PorkBridge 2011-12.
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TAILBITING - INTRO

- Pigs naturally tend to chew
  - Normal inquisitive investigation with mouth
  - Also attracted to blood
  - “Accidental” bleeding due to biting, once started, becomes infectious
- Damage to pig tails by pen mates contributes to major losses in pig industry
  - Constant low-grade problems
  - Explosive outbreaks

TAILBITING - INTRO

- VICE
  - Aberrant aggressive behavior in pigs (BPEX October 2007)
    - Can take form of tail, ear, flank, stifle, or even vulval or penis biting
  - Tail biting generally viewed as the most widespread and serious of these problems

<table>
<thead>
<tr>
<th>Types of Vice</th>
<th>Weaned Pig</th>
<th>Grow-Finish Pig</th>
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<tbody>
<tr>
<td>Navel sucking</td>
<td>Tail biting</td>
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<td>Prepuce sucking</td>
<td>Ear necrosis</td>
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<td>Ear sucking</td>
<td>Chewing feet</td>
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<tr>
<td>Tail biting</td>
<td>Flank biting</td>
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SEVERE TAILBITING - EUTHANASIA

SEVERE TAILBITING – CARCASS CONDEMNATION
TAILBITING - INTRO

- Relationship between tailbiting in pigs and disease lesions and condemnations at slaughter (Kritas and Morrison, 2007)
  - 7000 pigs in each of two studies
  - Association between the severity of tail biting and the prevalence of lungs with abscesses and/or pleuritic lesions
  - Associations between the severity of tail biting, and the prevalence of external carcass abscesses and carcass trimming

TAILBITING - CAUSES

- Need to investigate and assess possible trigger factors
  - Single rogue animal? Larger problem?
  - Huge range of environmental, dietary, and husbandry factors identified as triggers
  - Tailbiting is a consequence of raising pigs
    - Attend to basic biological needs of pigs to minimize risk of damage
  - Professional veterinary advice is essential to unravel the cause of these “unhappy pigs”

TAILBITING TRIGGERS

- Curiosity/Behavior
- Production system type
- Tail docking
- Stress
  - Stocking rates
  - Temperature variation
  - Nutritional

CURIOUSITY

- Tailbiting as a vice activity
  - Frustrated foraging activity?
    - Environment enrichment
  - Teeth changes
    - 3-4 weeks and 7-8 months of age
    - Desire to chew during teething
  - Normal inquisitive investigation with mouth
    - Can result in “accidental” bleeding

CURIOUSITY/BEHAVIOR

- Attraction to blood (Fraser, 1987)
  - Strong but highly variable response
- Gene expression effect (Brunberg, 2011)
  - Selection for production may have inadvertently increased abnormal behaviors (i.e. tailbiting)
  - Genetic line differences
- Gender differences
  - Increased prevalence of tailbiting in castrated males vs. females (Kritas and Morrison, 2007)

EFFECT OF PRODUCTION SYSTEM

Tailbiting % of Weaners & Growers Affected

Source: NADIS Pig Health bulletin, October 2007
**TAIL DOCKING**
- Greater tail biting when tails left long or longer
  - Relative insensitivity of end portion of pig’s tail

**STOCKING RATES**
- Increased pig density increases competition for food and water
  - Can result in forceful biting when feeder/waterer space is limited
    - Pen layout
    - Mixing pigs
    - Size variation within pens
  - Variable results in studies

**TEMPERATURE VARIATION**
- Excessive heat or cold
  - Misting pigs in hot weather has shown to reduce tail biting
- Drafts
  - Pigs may huddle and end up getting overcrowded and stressed
- Other air quality issues:
  - Low ventilation rates in cold weather
  - High humidity
  - Dustiness
  - Noxious gases

**NUTRITIONAL CAUSES**
- Insufficient/poor feed quality
  - Out of feed events
- Low salt levels
- Dietary tryptophan for biters?
- Vitamin E deficiency
  - High fat diets

**HEALTH COFACTORS**
- Presence/outbreak of PRRS and PCV
- Greasy pig disease or exudative epidermitis
- Diseases involving diarrhea

**PREVENTION OF TAILBITING**
- Overall: ensure you are meeting the pigs biological needs and minimizing stress!
- Identify and reduce risks, monitor, and react quickly
- Address causes/triggers we have already mentioned
  - Use chewable objects in pens
  - Use of straw if system allows
PREVENTION OF TAILBITING

- Tail docking to 1/4 - 1/3 of original length
  - Minimize range of lengths
  - Increase in ear biting may occur
- Avoid overstocking
- Ensure correct ventilation rates and environmental temperatures
- Proper lighting (keep down to 60 lux and provide at least 6 hours of darkness)

- Ensure freely available feed and water that is of proper quality
  - Quality control
  - Feed management to avoid “out of feed” events
- Review pen layout and hygiene
- Review stocking rates, health control SOPs and overall health management of the herd

TREATING TAIL BITING

- Spray-mark suspected biters
- Remove/treat bitten pigs ASAP
  - Prevent behavior pattern from extending to other pigs
  - Avoid turning into full-blown systemic disease
    - Dress/spray bitten tail with antiseptic
    - “Antibiting” sprays can be applied
    - Use of Stockholm Tar or similar products to minimize further damage to affected areas
    - Consult with vet about use of broad spectrum antibiotic to prevent spread of the infection

Questions? Discussion?