Food Animal Initiative

*ENVIRONMENTS FIT FOR **ANIMALS** FIT FOR THEIR ENVIRONMENT*

FAI 2 - Overview Pig Development - August 2004

Physical data

- Breeding herd of 30 sows farrowed in family groups each comprising 5 sows, established autumn 2002.
- The unit is now moving to Gloucester Old Spot sows in order to produce Gloucester boars for crossing sires.
- A Landrace/Large White boar is use for commercial breeding and a Gloucester boar for pedigree breeding. Boars are never without direct contact with other pigs.
- Target is sows to farrow twice yearly rearing an average of 9 piglets weaned at 7 weeks onwards.
- Both sows and piglets remain in their family groups with replacements reared in the group.

The ground at FAI Oxford is not suitable for outdoor pig production. Many pigs are kept in circumstances where access to pasture is not feasible and land of suitable type for outdoor pig production is limited. We therefore decided to focus on the development of an indoor/yarded system which addresses the following issues:

FAI Projects	*'…….Results so far'*
1. Provision of dietary fibre for pigs in line with legislative requirements. (See TDS P5, **High fibre diets for pigs**).	Growth rates obtained have been comparable to the top third of commercial pig production.
2. Maintenance of thermal and physical comfort. (See TDS P1, **Thermal and physical comfort for pigs).**	The system provides thermal comfort through straw (warmth) and woodchip wallows (cooling). Both materials provide physical comfort.
3. Tail biting (See TDS P3, **Preventing tail biting and leaving tails on pigs**).	No tail biting has occurred in the unit.
4. Provision of rooting materials through 'integral environmental enrichment'. (See TDS G1, **Integral environmental enrichment for farmed animals).**	Pigs spend well over half of their waking time rooting and this is a vital natural behaviour for their wellbeing. Woodchip has proven an ideal rooting material and has been shown to be preferred to straw for this purpose.
5. Provision of free farrowing in indoor systems (See TDS P2, **Free farrowing for indoor sows).**	Piglet mortality was higher than desired and this has now been resolved.
6. Maintaining pigs in peer groups. (See TDS G2, **The importance of maintaining animals in peer groups).**	There was limited aggression within groups of both sows and finishing pigs which has resolved with the move to Gloucester and outdoor type sows.
7. Removal of the need for routine antimicrobial use (See TDS G4, **Reducing antibiotic use in farmed animals**).	Antimicrobial use is very limited and relates to isolated cases of lameness or difficulties around farrowing.
8. Eating quality issues in pork (See TDS P4, **Improving the eating quality of pork).**	Multiple taste trials show pork from the system matches or exceeds other premium products.
9. Waste and pollution control in pig units. (See TDS G3, **Nitrogen balance on farm).**	The compost from the unit is spread directly into the farmland. There is no criticism from environmentalists as heavy metals i.e. copper are not contained in the diet.
10. Commercial viability in pork production	Cost of production currently £1.22 compared to £1.05 for standard pork with potential for reduction through scale.

Further developments for 2005

1. The progression of automation of handling high fibre diets and provision of trough space for pigs will be developed with the increase of the pig herd to 45 sows summer 2006.
2. Funding from BPEX has been obtained to market a high quality pork product. The project has begun and pigs will be available for sale in 2006.

Priority for the future

- Establishing the correct sow breed for the system is now vital based on a quiet sow with good mothering ability producing 9-10 finished pigs per litter. Current commercial sows produce higher levels of piglets than is necessary resulting in higher losses and unnecessary pressure on the sows.