



# The UK's largest facility to improve avian nutrition, health and welfare

The Allermuir Avian Innovation and Skills Centre (AISC) is the only poultry research facility in the UK that can accommodate scientifically sound replicated trials all the way from small-scale pilots through to testing ideas under near commercial conditions.

Two, flexibly configured animal houses are available to study nutrition, physiology, behaviour, health and welfare to better service breeding, nutrition & health research and knowledge exchange.



The Allermuir AISC builds on decades of strategic and applied poultry research, learning and consultancy activities. It encompasses all aspects of poultry science, including nutrition, behaviour and welfare, product quality and safety, and gut & skeletal health.

This is achieved through unrivalled research and delivery capability that includes a near-commercial scale brooder facility, complemented by an additional multi-purpose poultry house comprising multiple small-scale animal rooms, Home Office approved raised-floor units, enriched housing layer facility and large floor pen facilities. Research-scale hatching capability is under development.

SRUC designs, manages, and delivers major research projects in poultry science to an internationally-recognised high standard, from concept through to robust demonstration of application.

### Particular areas of expertise include:

- ✓ Poultry production
- ✓ Nutrition (all aspects)
- ✓ Behaviour and welfare
- ✓ Sub-clinical challenge models
- ✓ Product quality (including zoonotic load)
- ✓ Regulatory studies with EFSA compliant reporting

### Contact

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# **Technical specification**

- > Two houses
- ➤ Space and flexible configuration to accommodate small-scale pilot studies to near commercial-scale trials
- > Broilers
- Turkeys
- Layers
- ➤ Research-scale hatching capability in development

### **Brooder House**

- > 1120 m² room for 144 floor units (up to 5760 broilers)
- Optional simultaneous multiple studies under commercially-relevant stocking density
- > Flexible penning to accommodate turkeys

### Multi-Purpose Poultry House (3 key areas)

- 1 64 experimental units in 230m² for up to 1344 laying hens (enriched colony units; 21 birds per unit)
- 2 Four identical animal rooms of 20m² each with space for up to 12 floor units each (48 floor pens total; 240 broilers per room). Flexible penning to accommodate layers with nest boxes
- 3 36 Home Office compliant multi-tier raised floor units (metabolism units) in 180m². Unit size: 2.25m², nine broilers or six turkeys per unit (total 324 broilers or 216 turkeys) for digestibility studies

# **Observations and measurements** (not inclusive)

### **Broiler / Turkeys**

- Production data (feed/water intake, weight gain, mortality)
- > Carcass quality
- > Gut lesions, morphology and microbiology
- > Behaviour and welfare assessment
- > Blood biochemistry and haematology
- > Litter, hock and foot pad scoring

### Layers

- Production data (egg output, feed intake, weight gain)
- > Egg quality
- > Behaviour and welfare assessment
- > Gut lesions, morphology and microbiology

### **Nutritional Value**

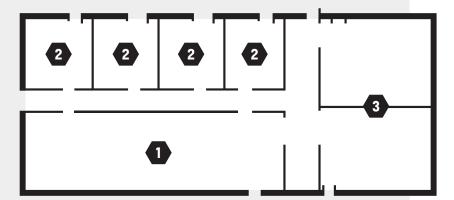
- Excreta collection for total tract digestibility (AME, nutrient and mineral losses)
- ➤ Digesta collection for marker-assisted standardised ileal digestibility using test and N-free diets
- Production data for quality control (feed intake, weight gain)
- > Gut lesions, morphology and microbiology
- > Blood biochemistry and haematology



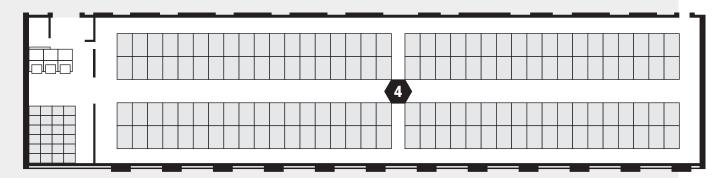
## **Schematic layout**

- Allermuir Avian Innovation and Skills Centre (AISC)
- 1 230m² (up to 1344 laying hens)
- 2 20m² (up to 240 broilers per room) Flexible penning to accommodate layers
- 3 180m² (up to 324 broilers or 216 turkeys) for digestibility studies
- **4** 1120m² (up to 5760 broilers)

### **Multi-Purpose Poultry House**



### **Brooder House**



Plan for illustrative purposes only







