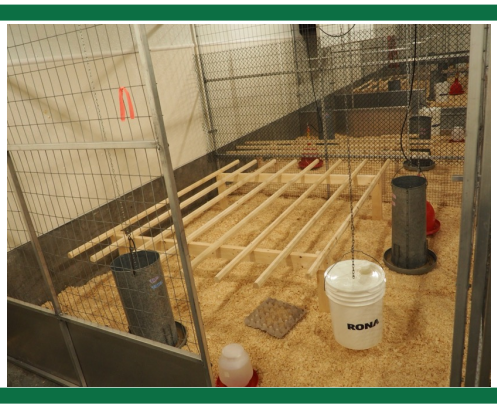
University of Saskatchewan
Poultry Management & Welfare

Research Summary
January 22, 2024

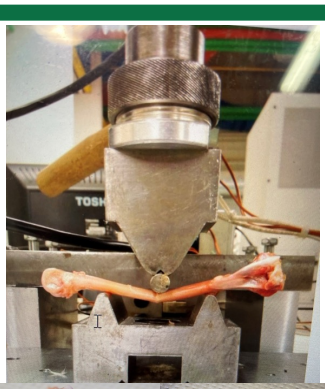
University of Saskatchewan

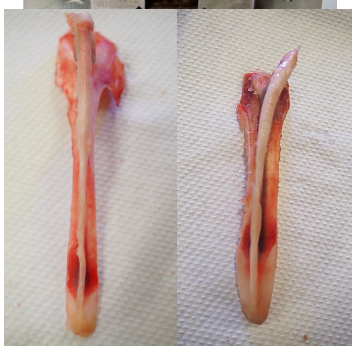


Effect of perch space allowance for pullets

PURPOSE OF THE STUDY

The objective of this project was to determine the effects of various perch space allowances for pullets reared to 18 wk. The current recommendations for perch space are based on laying hen data. We hypothesized that pullets, with smaller bodies and lighter weights than laying hens, will not require the same amount of perch space as adult hens.





WHAT WE DID

Two trials were conducted with 1,032 **Lohmann LSL-Lite** and 1,032 **Lohmann Brown-Lite** pullets housed in 16 pens per trial (129 birds/pen).

Pullets were provided with **6, 9, 12, or 15 cm of perch allowance per bird**.

Data collected included **body weight, feed disappearance, body width, comb damage, heterophil to lymphocyte (H/L) ratio, behaviour, successful perch navigation, perch use, keel bone deviations, mortality, and bone breaking strength.**

WHAT WE FOUND

Perch allowance had **no impact** on **body weight, feed disappearance, body width, comb damage (aggression), H/L ratio (stress), keel bone deviations, mortality, or humerus/tibia bone strength.**

Minor impacts were noted for **behaviour** and **tibia bone width/thickness. Minor inconsistent differences suggested no pattern of perch location use** (left, middle, right side of the perch and use of individual rails). Birds **successfully navigated** the perches in all treatments.

At 18 wk, the **brown feathered pullets were wider** when standing and sitting (12.9 and 13.9 cm) compared to the white feathered pullets (11.7 and 12.5 cm).

At 15 wk, during the **light period 22-37%** of bird used the perch. At 18 wk, during **the dark period 11-95%** of pullets perched.

LSL-Lite pullets perched more than Brown-Lite pullets regardless of age or time of day.

CONCLUSIONS

The body width data indicates that providing 6 and 9 cm/bird is not enough perch space to allow for all birds to perch simultaneously.
Providing 12 cm/bird of perch space allows a majority of birds to perch, while 15 cm/bird is more space than is required for these Lohmann strains up to 18 wk.

LES PRODUCTEURS D'ŒUFS DU CANADA
Dédiés à la qualité

EGG FARMERS OF CANADA
Dedicated to Quality

ABOUT US

Tory Shynkaruk is a Research Assistant under Dr. Karen Schwean-Lardner at the University of Saskatchewan.

Samantha McPhee is a Research Assistant under Dr. Karen Schwean-Lardner at the University of Saskatchewan.

Dr. Carolin Adler is a Post-Doctoral Fellow working with Dr. Karen Schwean-Lardner at the University of Saskatchewan.

Dr. Karen Schwean-Lardner is a Professor in the Department of Animal and Poultry Science at the University of Saskatchewan.