



MSc. Defence

THE EFFECTS OF MATERNAL LATE GESTATION METABOLIZABLE ENERGY INTAKE AND PARITY ON BEEF COW-CALF PERFORMANCE AND METABOLISM

Emily Croft

Date: August 19th 2022 at 1:00pm

The MSc Defence for Emily Croft has been scheduled for August 19th, 2022 at 1:00pm. The defence will be held online via Teams and room 141: [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_MzczZGFIMzMtMDQ3Ny00Y2M0LThlNGYtYTc1YzA3N2VkODg3%40thread.v2/0?context=%7b%22Tid%22%3a%22be62a12b-2cad-49a1-a5fa-85f4f3156a7d%22%2c%22Oid%22%3a%22fbd28915-dda5-478f-8ecb-a3682dcf0c3a%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MzczZGFIMzMtMDQ3Ny00Y2M0LThlNGYtYTc1YzA3N2VkODg3%40thread.v2/0?context=%7b%22Tid%22%3a%22be62a12b-2cad-49a1-a5fa-85f4f3156a7d%22%2c%22Oid%22%3a%22fbd28915-dda5-478f-8ecb-a3682dcf0c3a%22%7d)

**The exam committee will consist of:**

Examining Chair: Dr. Wendy Pearson

Advisor: Dr. Mike Steele

Adv. Committee Member: Dr. Katie Wood

Additional Graduate Member: Dr. Marcio Duarte

**Abstract:**

These studies evaluated the effects of metabolizable energy (ME) intake and parity of Angus-Simmental cows during late gestation on cow and calf performance and metabolism. Primiparous (n = 47) and multiparous (n = 109) pregnant Angus-Simmental beef cows were allocated to dietary treatments providing 80 (LME; n = 54), 100 (CME; n = 51) or 120% (HME; n = 51) of their predicted ME requirements 53 days prior to calving. Diets were formulated to meet or exceeded metabolizable protein requirements. After parturition, a common ration was fed. Cows that received HME mobilized less fat prepartum than cows that received LME. Supplementation of ME did not affect cow or calf performance postpartum. Primiparous cows had relatively greater mobilization of body reserves than multiparous cows, and their calves grew slower. These studies demonstrate that supplemental ME during late gestation can improve energy deficits relative to ME restricted cows prepartum, but not postpartum.