

**July 7, 2020 - Advisory Board Meeting  
NDSU-Hettinger Research Extension Center**

**Animal Science Report**

**Graduate Students:**

- Graduate students and undergrad technicians:
  - Paige Anderson – M.S. – Animal Science (Travis Hoffman, Dr. Stokka)
  - Rika Baumgaertner – Ph.D. – Animal Science (Carl Dahlen)
  - Robin Malik – M.S./Ph.D. – Animal Science (Scott Kronberg)
  - 1 Animal Science internships for the summer (Brazil)

**Strategic Plan - Progress towards goals: *Evaluate alternative livestock production systems that increase profitability while maintaining environmental stability***

- Outreach efforts:
  - Fall Ram Test - Field Day March 14, 2020
    - 64 rams from 21 producers: Rambouillet, Columbia, Dorset, Genelink
  - Shearing and Wool Classing School: November 21-23, 2020
  - Sheep Schools with Extension for Starter Flock Recipients: September 19, 2020
  - OFDA: Newel Ram Sale, Rapid City Stock show
  - Wool tartan blanket project
    - Currently spinning wool into yarn to be woven by Faribault Woolen Mills
    - Proceeds to go to Animal Science and Textile Department scholarships with a projection of 350 blankets, and \$20,000 to each Dept.
    - Anticipate having them for sale by Homecoming.
    - HREC wool sold to the project, and HREC coordinated the cleaning and spinning.
- Sheep Research:
  - *Impacts of flax on female and male reproductive traits when supplemented prior to breeding in sheep* (Amanda Long M.S. program)
    - 2 articles published this week.
  - *Impacts of banamine injection on pain responses of either rubber ring castrated and tail docked or surgically castrated and burdizzo docked lambs* (Paige Anderson, M.S. program)
    - \$9,555 for trials
    - Finishing M.S. Thesis and writing, presenting at WSASAS next week.
  - *Effects of loin eye muscle depth on accuracy and variation of loin eye area prediction and carcass yield via ultrasound in Rambouillet sheep*
    - \$5,340 for travel funds
    - Have collected some carcass data, still need to get more ultrasound data
  - *Genetic marker for “blown legs” in Rambouillet rams*
    - Collaborated with the U of Idaho to determine if there is a genetic marker for “blown legs” in Rambouillet rams.
    - Have a potential “region” of the DNA we are targeting. We collected more data this year.
  - *Effect of dried distiller’s grains and particle size on feedlot lamb growth, carcass traits, nutrient digestibility, and ruminal fermentation*
    - \$9,907 for research trials

- Monise and Paige running the feedlot trial this summer, metabolism trial this winter.
  - *Effect of paternal divergent nutrition before breeding on semen characteristics, pregnancy rate, ram lamb growth and reproductive performance and carcass traits.* (Rika Baumgaertner Ph.D. program)
    - \$16,081 for research trials
- Cattle Research:
  - Grazing studies with Range and Wildlife program (Integrated project – Strategic Plan #5)
- Publications:
  - Refereed – 1 in review
  - Proceedings – 2 this summer
- Extension Specialist: Dr. Janna Kincheloe