NSIP vs Non-NSIP Projects

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Overview

- Project Goal
- Principles of NSIP >>> EBVs
- Leading Edge Project
- EID Mountain States Project
- Summary
Project Goals

- NSIP vs non-NSIP
  - I dislike this idea!!!
    - Enrolling in NSIP Does Not Make Your Sheep Better
    - NSIP Provide EBVs That Allow Breeders to Breed Better Sheep
    - Comparing Apples to ????
    - Tom Brady vs Johnny Manziel
    - Comparing a Known Quantity to an Unknown Quantity

- Taking Research to The Ranch
  - I love this idea!!!
National Sheep Improvement Program
NSIP Mission:

To provide predictable, economically-important genetic evaluation information to the American sheep industry by converting performance records into relevant decision-making tools.
Animal Performance Data

Low Performers

Average Performers

High Performers
Genetic Improvement
Leading Edge Project

- Conducted at Mickel Ranch in Utah
- 19 NSIP Terminal Sire Rams
  - Average of 3.3 kg weaning weight EBV - 25% Breed
  - Average of 5.5 kg post-wean weight EBV - 25% Breed
- 19 Terminal Rams Sourced Conventionally
- Flock Management
  - Bred in Two Groups on Winter Range
  - Twins Shed Lambed, Singles Range Lambed
  - Early Born Lambs Tagged - Varying Colors
  - Ewe Flock was Combined and Managed Similarly
  - Weaned off Mountain Range & Sorted onto 2 Different Trucks
Leading Edge Project

- 800+ Lambs Sired by NSIP and Non-NSIP Rams
- Lamb Weaning Weights
  - Non-NSIP Sired Lambs
    - 102 lb average wean weight
  - NSIP Sired Lambs - 3.3 WWT & 5.5 PWWT
    - 105 lb average wean weight
EID Mountain States Project

- Conducted at David Arieux farm in Iowa
- 2 NSIP Terminal Sire Rams
  - Suffolk - 1.8 WWT; 3.0 PWWT; 0.31 EMD; -0.76 FAT
    - 50% of Breed Average
  - Hampshire - 3.8 WWT; 7.2 PWWT; -0.29 EMD; -0.9 FAT
    - 5% of Breed Average
- 2 Non-NSIP Terminal Rams Sourced Conventionally
EID Mountain States Project

- Flock Management
  - NSIP Sires Used Early and Non-NSIP Sires Used Late
    - Randomly Assigned to Ewes
  - Lambs Were EID Tagged at Birth
  - Two Weaning Weights and Post Weaning Weights Collected
  - Lambs Were Harvest in 2 Loads
  - Carcass Data Was Collected
Preliminary Data

- NSIP - S: 78
- Suffolk: 67
- NSIP-H: 70
- Hamshire: 16

Lambs
Preliminary Data

![Graph showing preliminary data for ADG1 and ADG2 with values for different breeds.]

- **ADG1**: NSIP - S: 1.05, Suffolk: 1.06, NSIP-H: 0.97, Hamshire: 0.92
- **ADG2**: NSIP - S: 0.87, Suffolk: 0.85, NSIP-H: 0.73, Hamshire: 0.78
Preliminary Data

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Preliminary Data

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Preliminary Data
Preliminary Data

![Bar chart showing LEA values for different categories]

- **NSIP - S**: 3.05
- **NSIP - H**: 2.73
- **Suffolk**: 2.8
- **Hamshire**: 2.87

*Source: Texas A&M Agrilife Extension*
Preliminary Data

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Summary

- NSIP vs non-NSIP Studies
  - Leading Edge Project
    - Quite indicative of EBVs
  - EID-MS Project
    - Design Issues Make Any Useful Comparisons Difficult
- EID Technology Makes Ranch Research Easier