

NSIP vs Non-NSIP Projects

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TEXAS A&M
AGRILIFE
EXTENSION

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

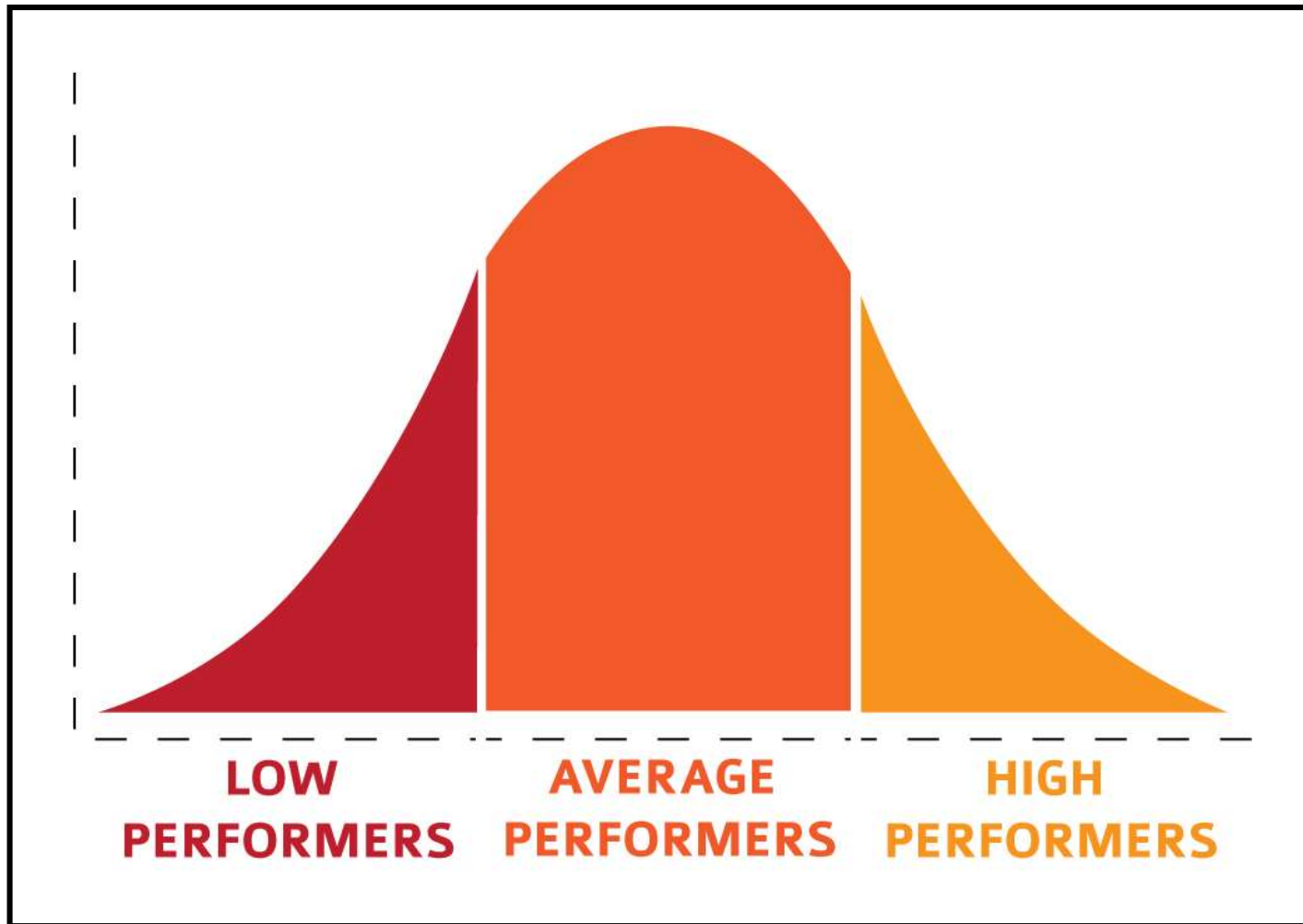
America's
GENETIC FOUNDATION
FOR A PROFITABLE

Sheep
INDUSTRY

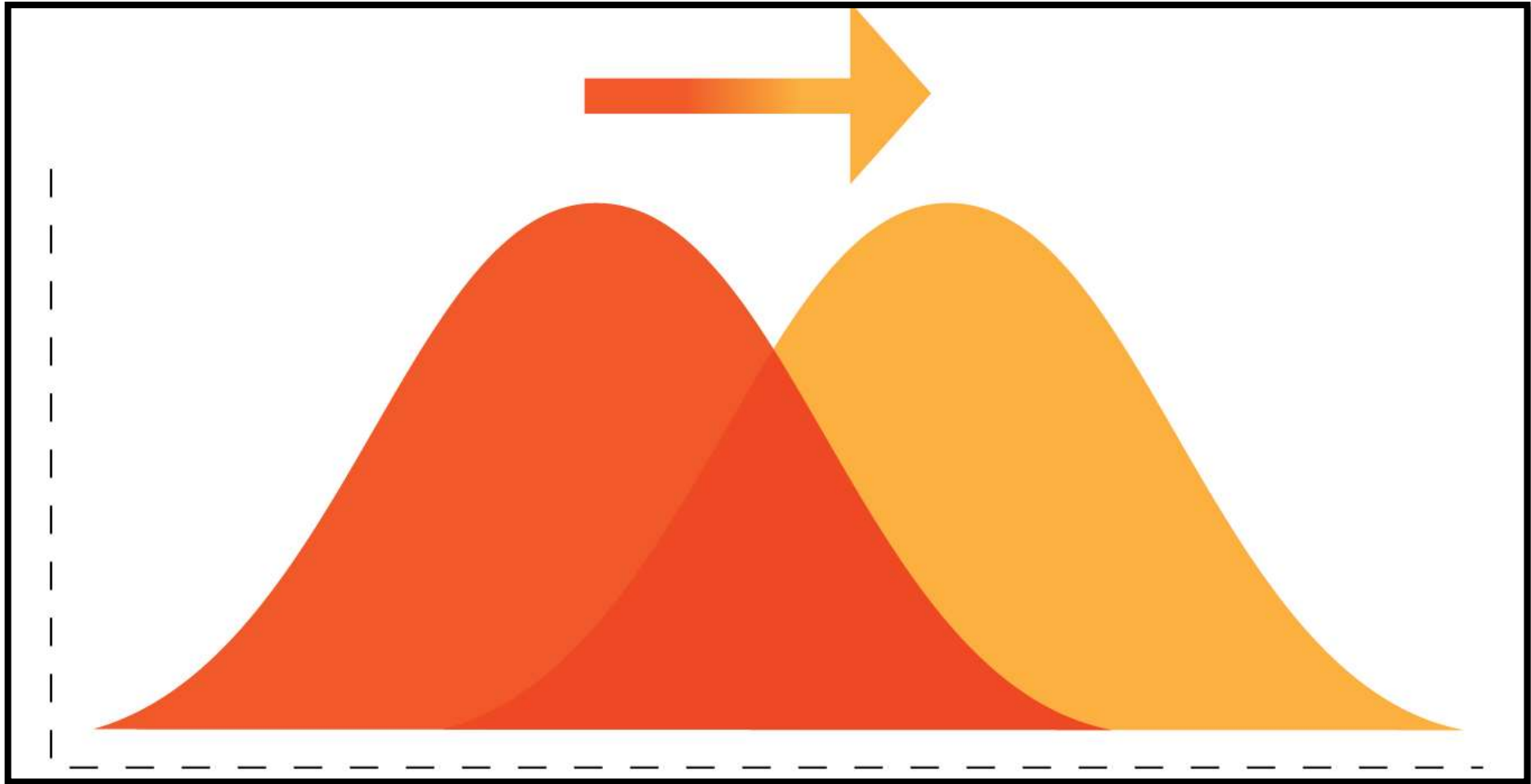
NSIP Mission:

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



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

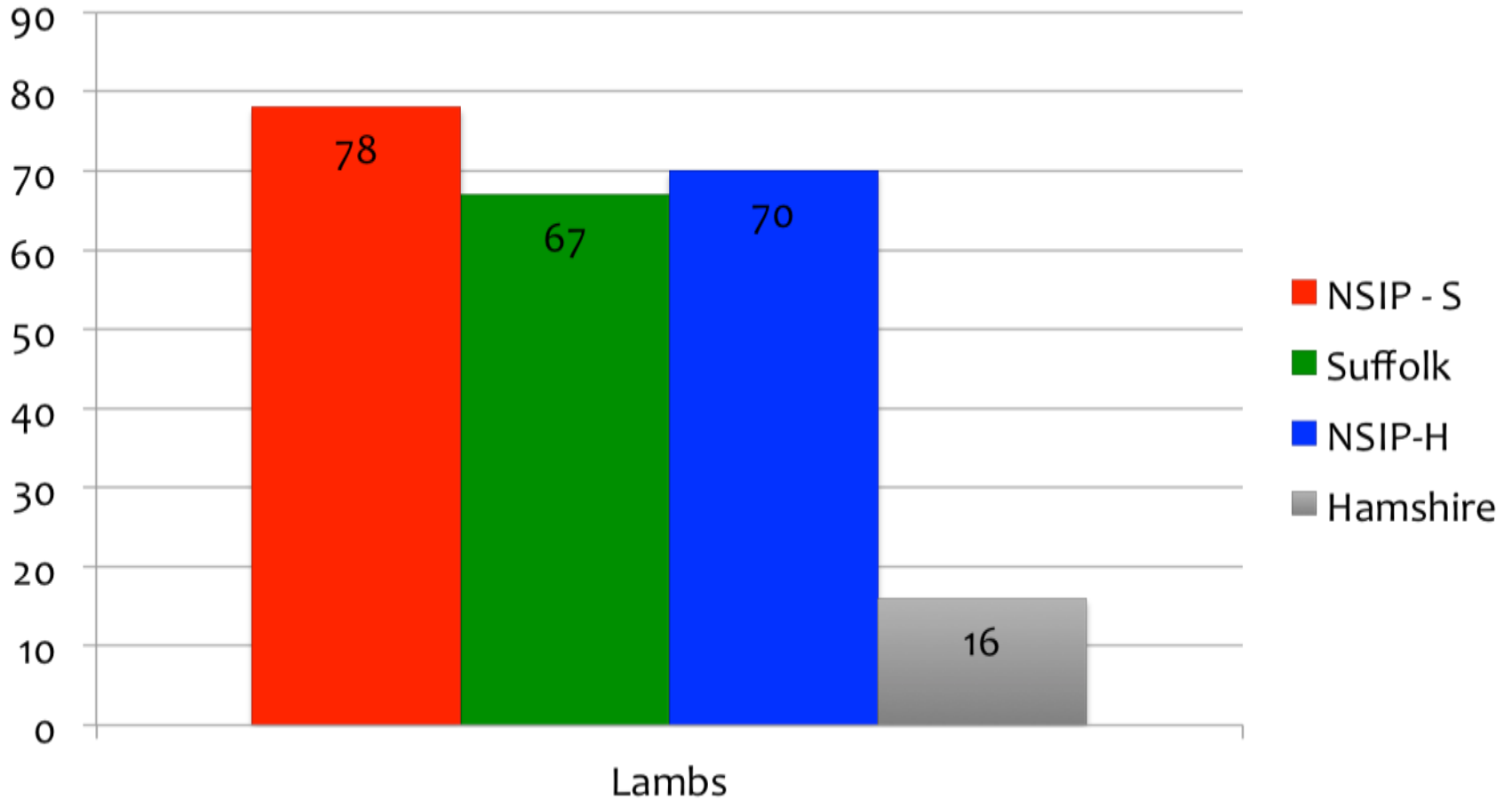
- ⦿ Conducted at David Arieux farm in Iowa
- ⦿ 2 NSIP Terminal Sire Rams
 - ⦿ Suffolk - 1.8 WWT; 3.0 PWWT; 0.31 EMD; -0.76 FAT
 - ⦿ 50% of Breed Average
 - ⦿ Hampshire - 3.8 WWT; 7.2 PWWT; -0.29 EMD; -0.9 FAT
 - ⦿ 5% of Breed Average
- ⦿ 2 Non-NSIP Terminal Rams Sourced Conventionally

EID Mountain States Project

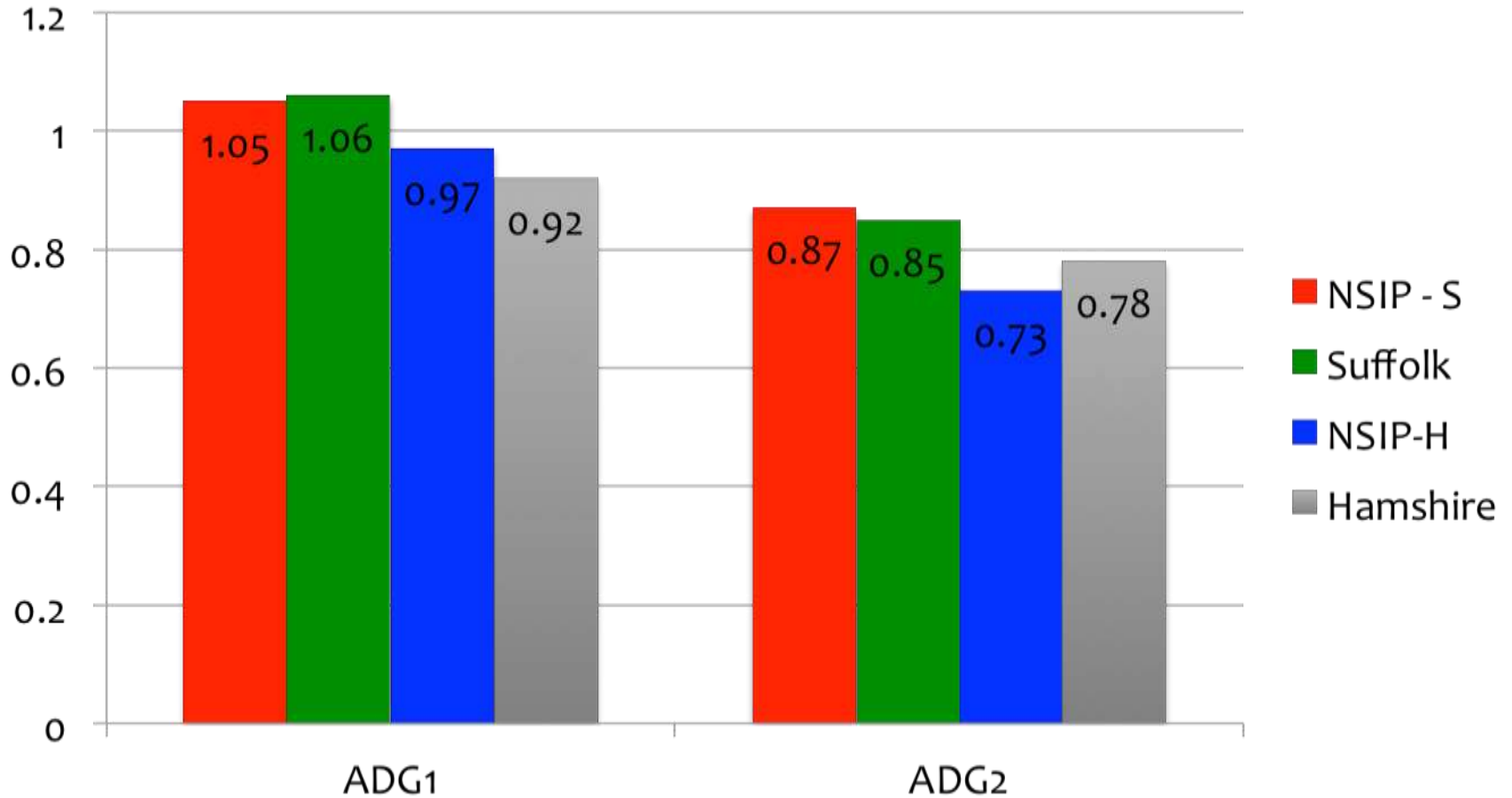
⦿ Flock Management

- ⦿ 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

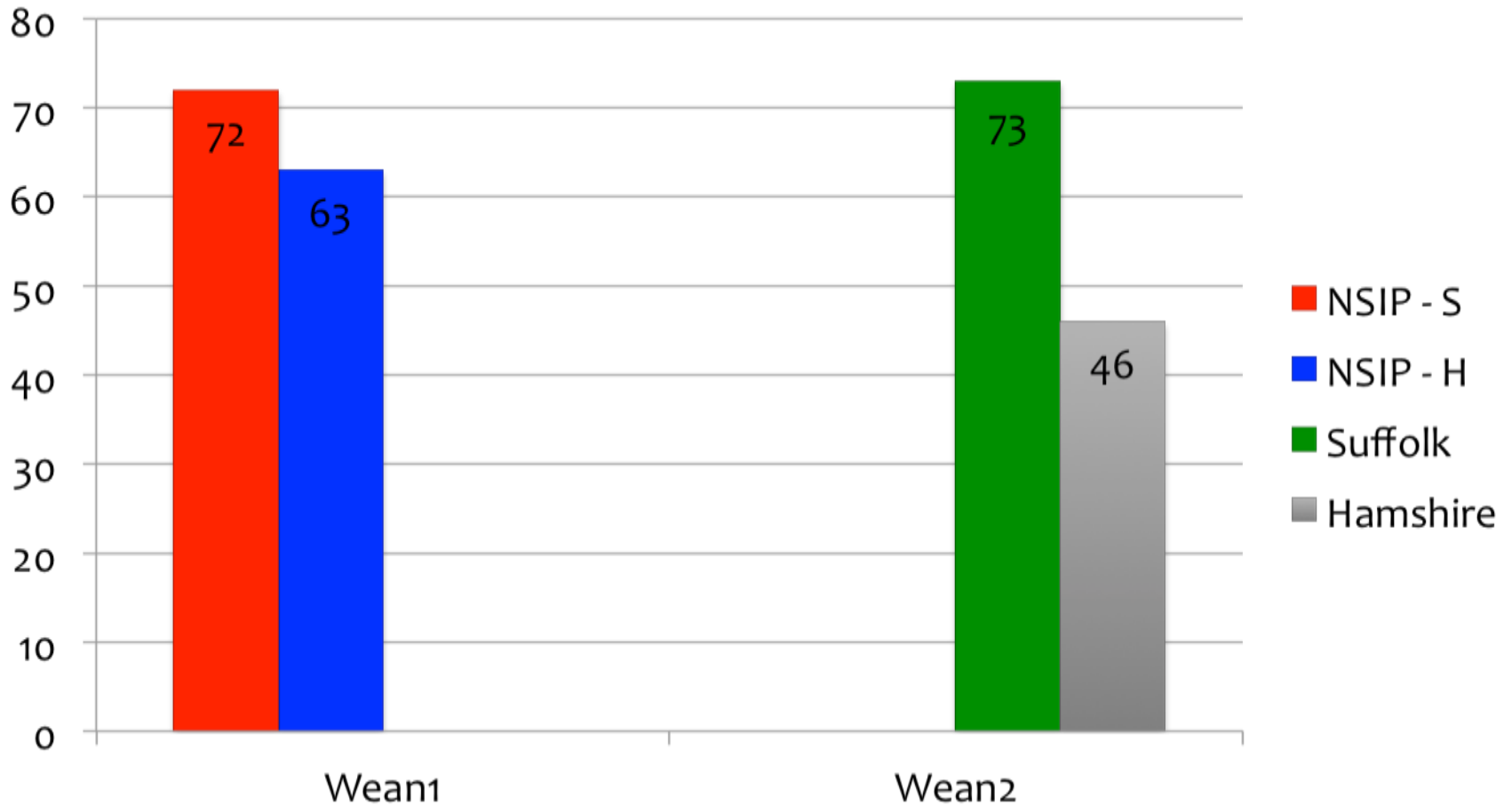
Preliminary Data



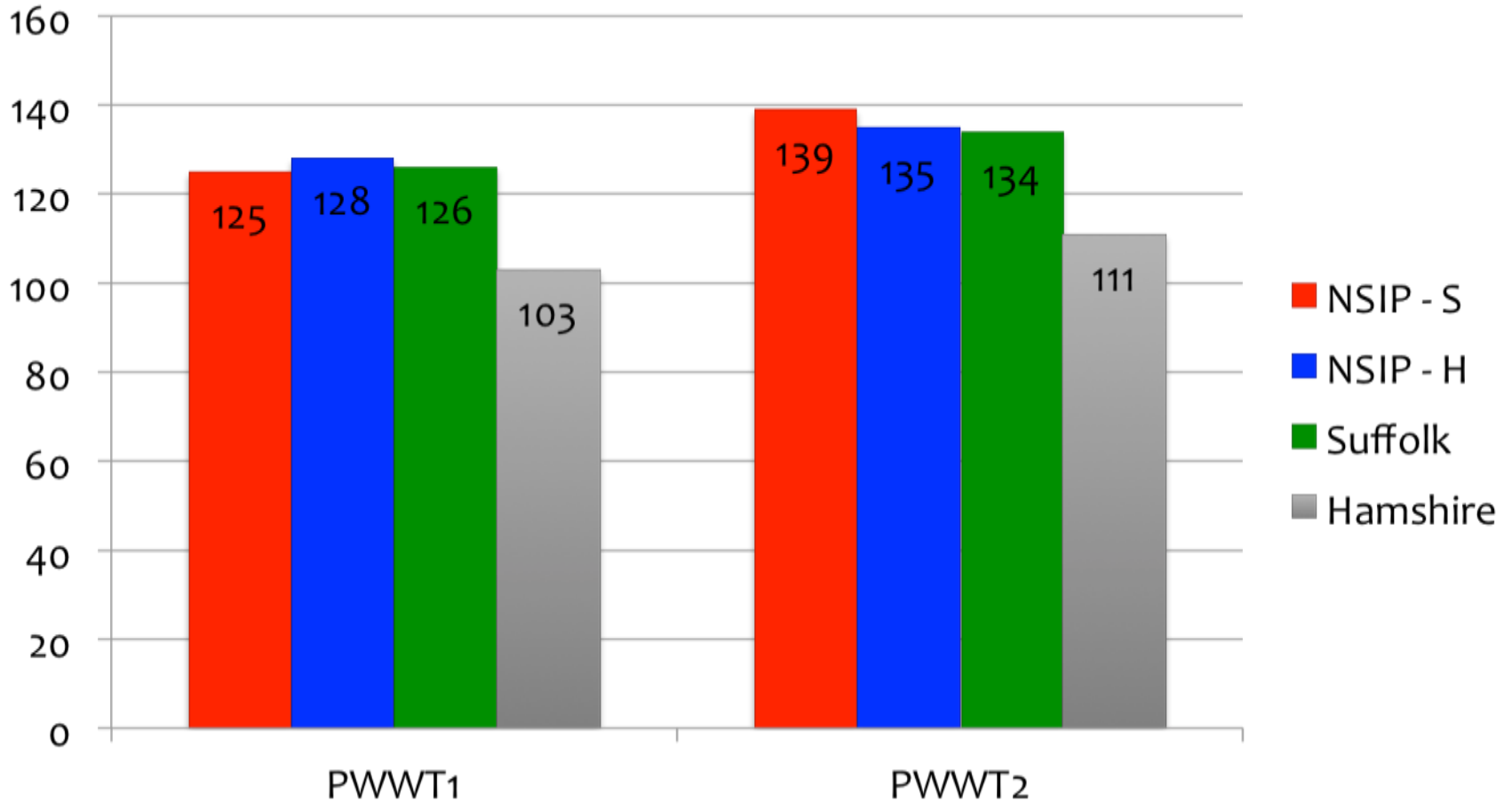
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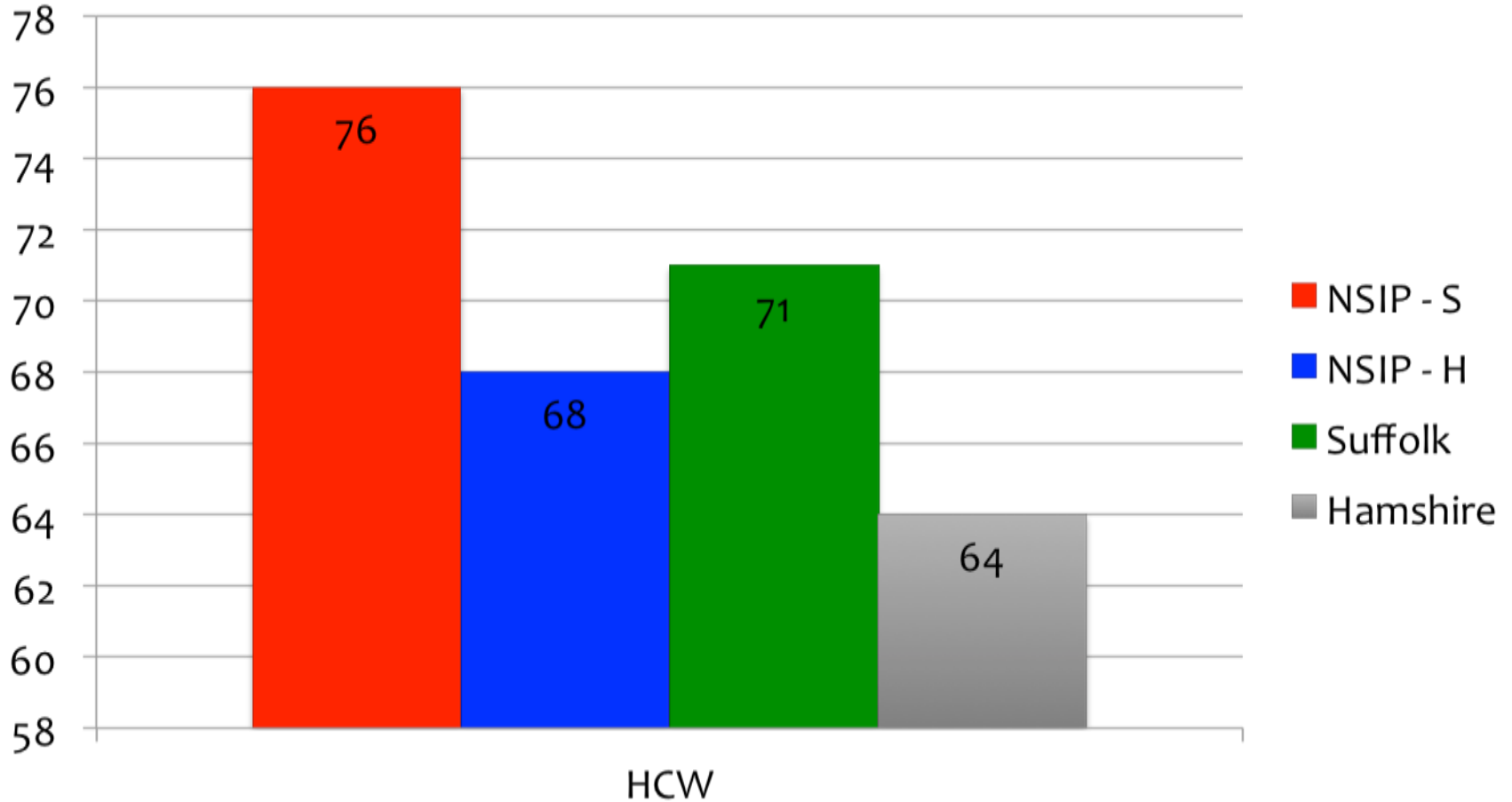
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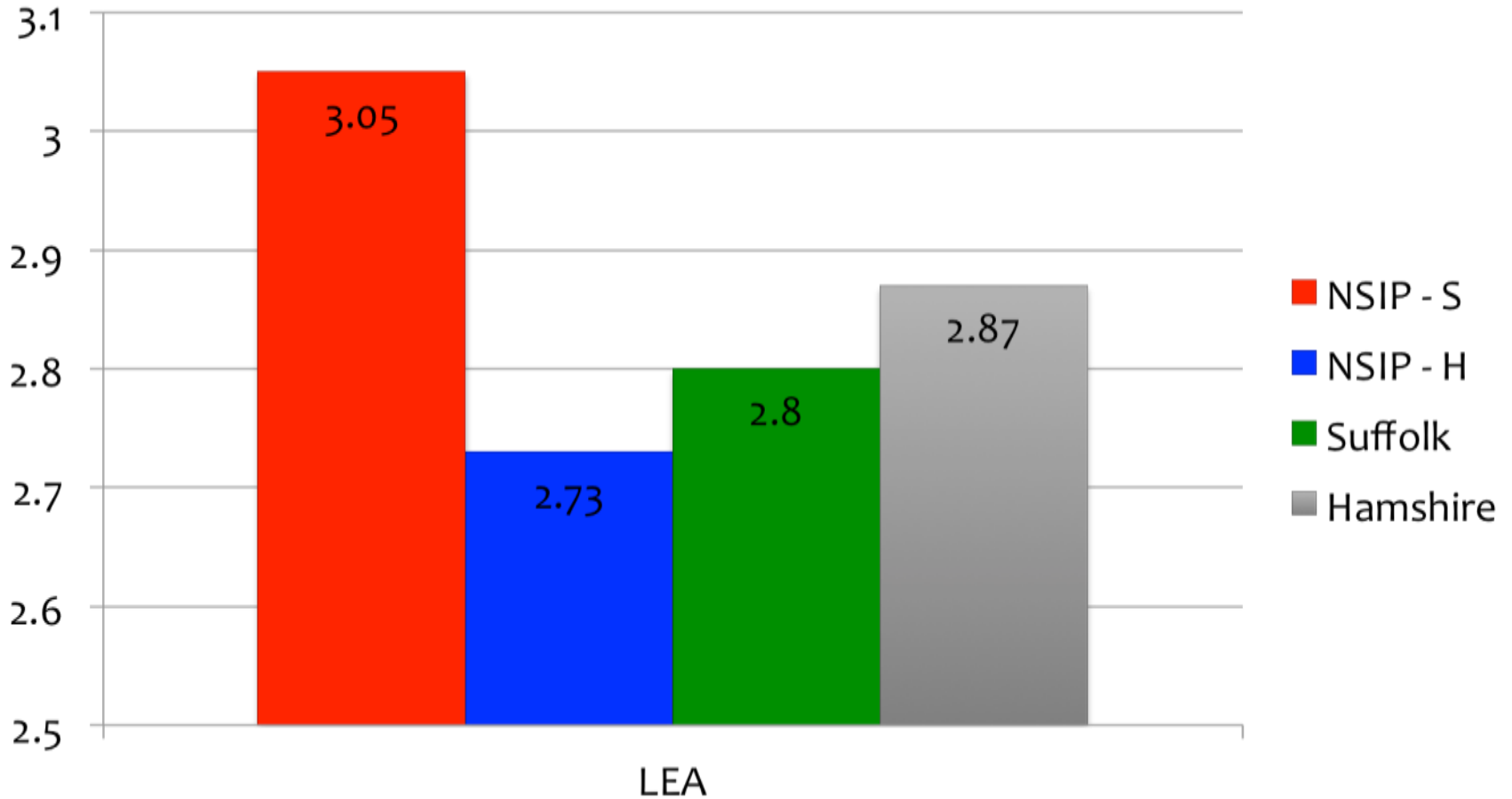
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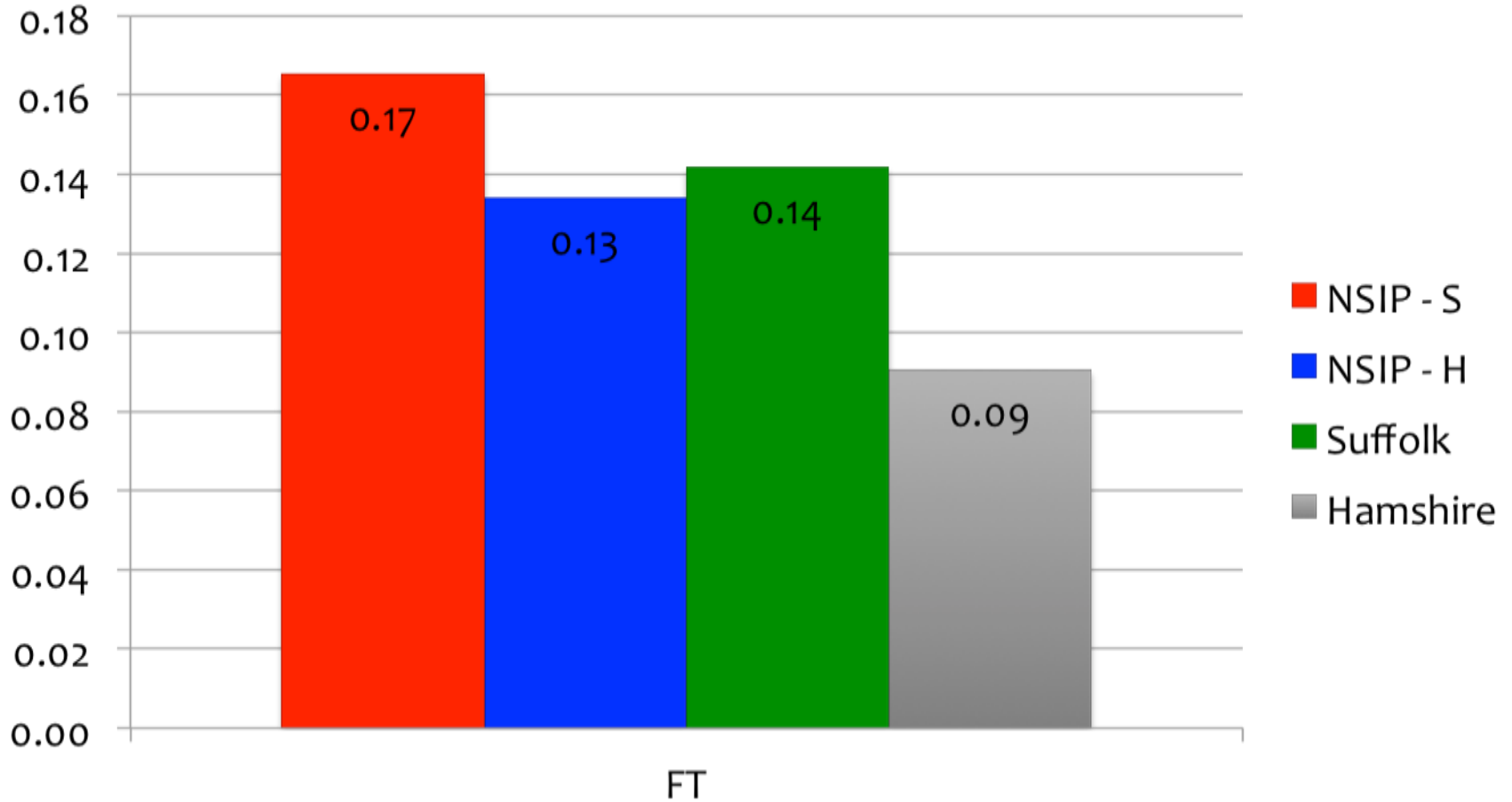
Preliminary Data



Preliminary Data



Preliminary Data



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