

## Improving Genetics that focuses on Profitability of Fine Wool, Growth and Carcass Performance



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# Livestock Programs

- Sheep/Cattle are a major agricultural enterprise on Navajo Nation. The 89,745 sheep raised McKinley/San Juan, NM. IN Arizona 83% sheep raised in North/Eastern Arizona according to U.S. Department of Agricultural 2012 Census of Agricultural
- Land Grant Office Extension Program covers a wide spectrum through vital, basic and applied research areas of agricultural. Improving Genetics Focuses on Fine Wool, Growth and Meat Production
- Dine College and Black Mesa Water Coalition host Annual Wool Buy
- Ram Lease Program (SAMM Ram)
- Educating Navajo Producers (Workshop, Conference, Seminars and Hands-on Demonstrations)



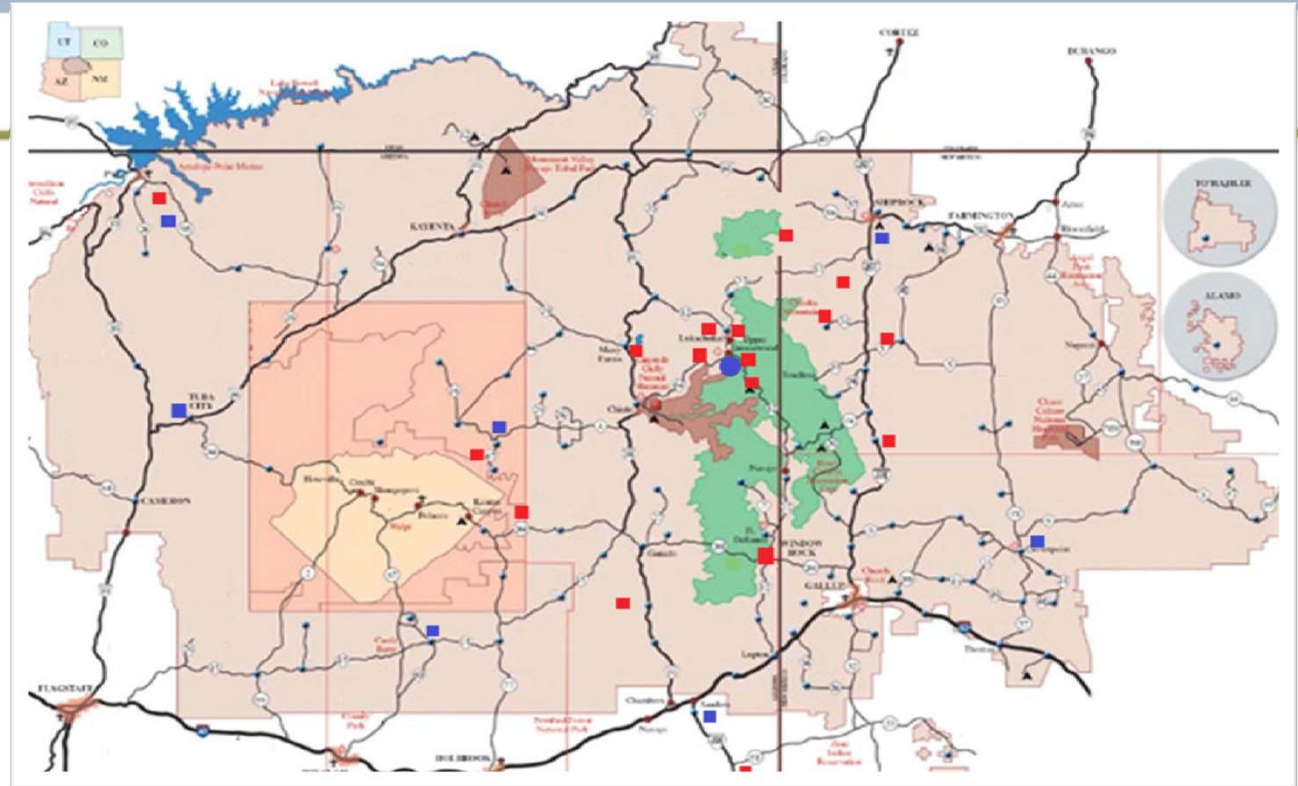
# Research vital, basic and applied science

- To identify phenotypic that influence wool quality, growth and meat performance
- Ram lease program produce 5yrs of spring lambs. Collect data from lamb crop and breeding ewes and determine livestock operation
- To study gene functions look for associations between genes and phenotypic traits



# Annual Wool Buy / Meat Production

- Wool Buy
  - 2012 \$8,453
  - 2013 \$32,622
  - 2014 \$46,691
  - 2015 \$42,911
- Mohair
  - 2014 \$741
  - 2015 \$7,588
- Courses Wool
  - 2015 \$325



# Ram Lease



- Producers know the value of wool traits and meat production
- Due to many sheep breeds crosses two, three or four. Little to no research describe retention from second-generation crosses.
- Recommendations to Producers establish herds to evaluate retention including purebred sheep, F1 crosses, F2 crosses, first and second-generation 3/8; 5/8 crosses and
- Crossbred x SAMM, indicates as much or more retention in the F2 than expected



# Environmental / Genetic Effects

- Lamb crop 75% twins; 17% singles and 2% triplets
- Gender Male 80% Female 20%
- Birth Weight with two months
  - 15lbs – 23lbs
- 2yr old lambs wool samples microns



# Summary

- Studies on Progression to develop estrous synchronization strategies of breed increase lamb growth and carcass characteristics
- Determine observation Net Feed Intake(NFI) associated with differences in ultrasound measures of carcass composition

# Thank you

- Wool Buyers
- USDA
- NMSU
- Producers
- Intern
- NNLVP

