

Wyoming's Sheep Industry and the World: Working with New Zealand

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UNIVERSITY
OF WYOMING

Extension
Sheep Program

My Background:

Academic Appointment:

*Extension (50%), Research (25%),
Teaching (25%)*

Extension: outreach in all aspects of sheep production, decision tools, one-on-one consultations with Wyoming ranchers and allied industry (e.g., Ram Test, Lamb a Year, Sheep Task Force)

Teaching- Train the next generation in the sheep industry, teach graduate undergraduate classes, wool judging program

Research- sheep health, nutrition, grazing systems, genetic improvement, product quality and marketing (lamb and wool)

This sabbatical strengthened all three missions



Why New Zealand?

Producing 4.63 times the lamb
and 12 times the wool on
similar land mass as Wyoming



	U.S.A	New Zealand
Sheep Inventory	5.03 Million Head	23.3 Million Head
Sheep Farms/Ranches	100,000	24,000
Lambing Percentage, %	107	131.1
Wool Production, tonnes	10,879	136,000
Lamb Processing Plants	5	32
Lamb Export Receipts, USD	\$15 Million USD	\$2.6 Billion USD

Where I Worked & What I Did

- **Lincoln University (Research + Teaching + Mentorship)**
 - Worked with sheep systems, parasitology, and forage agronomy faculty
 - Delivered lectures in a sheep production course
 - Supported honors student projects in sheep research
- **Beef + Lamb New Zealand (Extension architecture)**
 - Embedded into a levy-funded national extension organization
 - Studied and participated in Farmer to Farmer learning groups
- **Headwaters Genetics and Lumina Lamb Company**
 - Board Meetings
 - Spoke at large industry meeting “Muster”
- **Two ‘Innovators’ Exchange Programs**
 - Extension Innovators Exchange Tour
 - Wyoming Rancher Innovators Exchange Tour



Lincoln University Takeaways



- **Pathways vs Programs**
 - Cadet Training Farms
 - Diploma Programs (Associates Degree Equivalent)
 - Degree Programs (Bachelors 4 yrs)
 - Bachelors Degree (Bachelors +1, research)
 - Post-Graduate (M.S., Ph.D.)
- **Experiential Learning**
 - Structured field studies that integrate with agribusiness
 - Field Based Laboratories
 - Decision Making Tools (Using the software and tools that have been developed by industry)
- **Research Collaborations**
 - Pasture Agronomy benefits of diverse pasture systems (1st Internationally funded grant)
 - Established graduate exchange pipelines (connected placement of M.S. student into Ph.D)



Beef + Lamb NZ Takeaways

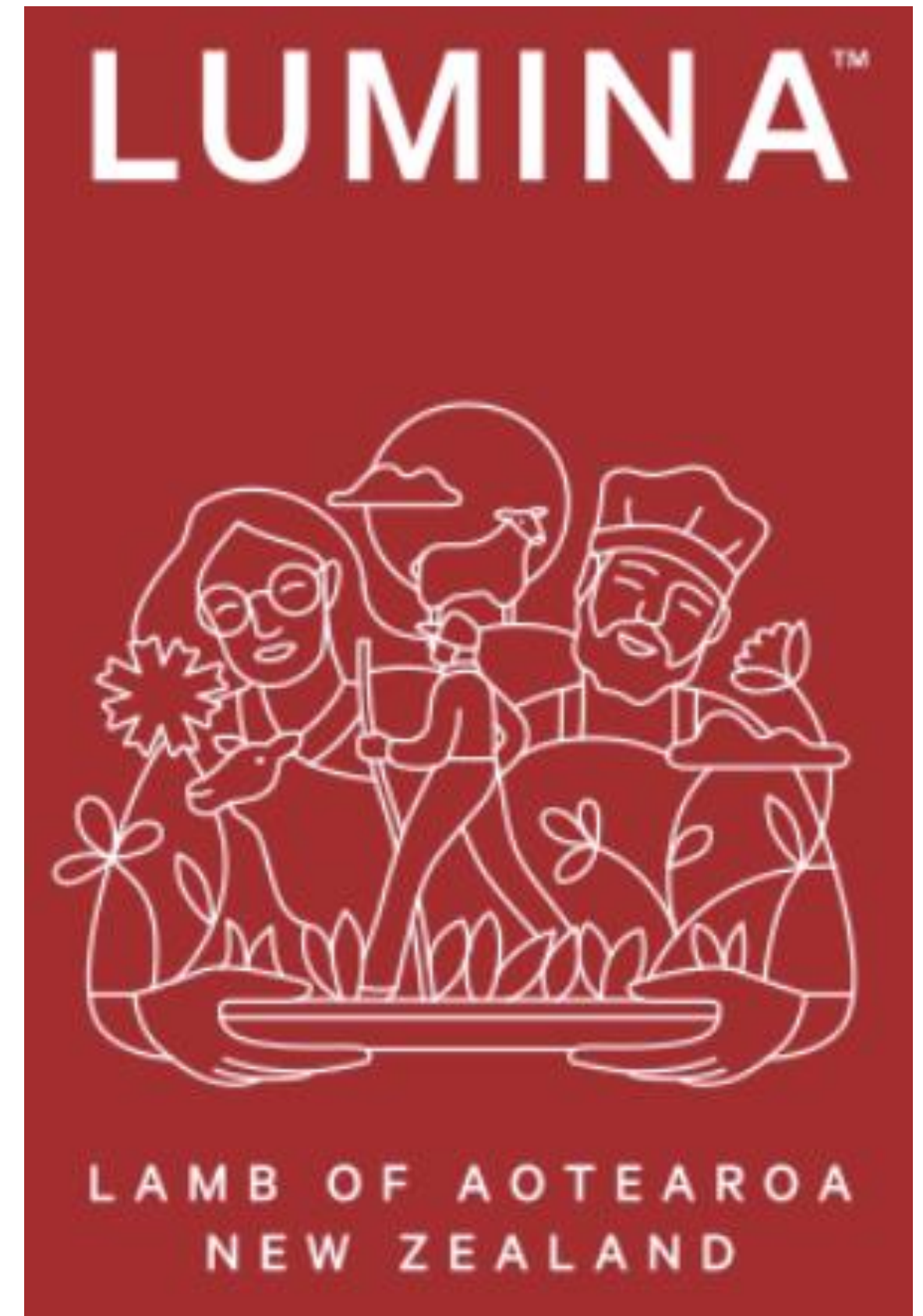


- Beef + Lamb NZ: **“by farmers, for farmers”**
 - Levy funded (\$0.75 per sheep, \$5.00 per cow = \$41 million annual budget)
 - Program philosophy: **“outcomes over output”**
 - Research, extension education, and promotion *designed to* operate as one system
- **Assessing Industry Needs and Initial Strategy Rollout**
 - Participated in National Program Rollout for Facial Eczema
 - Importance of identifying “key influencers” at beginning of rollout
- Farmer to Farmer Learning Groups
 - Participated in **“Hogget 101” field day (80+ farmers)**
 - Facilitation and Producer Network Building, **“Magic happens outside of the formal meeting”**
 - Greatest adoption comes from farmer to farmer networks
 - Balancing productivity with quality of life
- **We are initiating similar producer learning groups across the state**



What I Learned from Competitors' Lamb Marketing

- ~85–90% of NZ lamb production is exported
- Annual lamb export value ≈ US\$2.6 billion
- Production is designed for multiple global markets
- The U.S. is an important customer — but not the only one:
 - 1st China – largest by volume
 - 2nd European Union – premium chilled lamb
 - 3rd United Kingdom – traditional retail & foodservice
 - 4th United States – high-value cuts & branded programs (10-15% of NZ lamb export value)
 - 5th Middle East – halal markets
 - 6th Other Asia (Japan, Korea, Taiwan)



Lumina Lamb Takeaways

Marketing Innovation: Lumina Lamb & Premium Value Chains

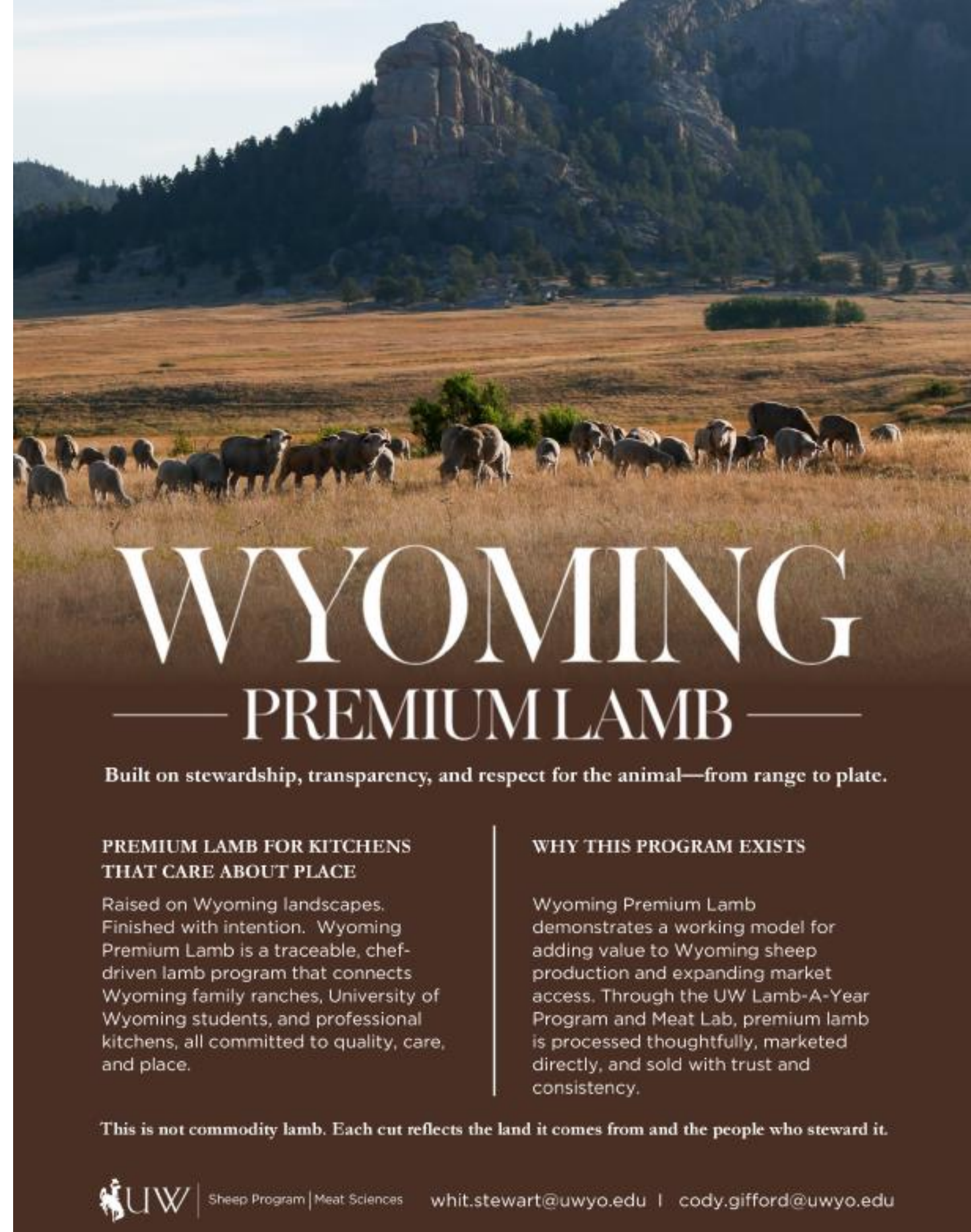
- Proprietary composite breed for tenderness and intramuscular fat
- Strict finishing requirements and branded quality targets
- Market strategy built around **value differentiation + storytelling**

Professional impact

- Invited keynote speaker at Lumina Muster (300+ attendees)

Wyoming application

- Translating lessons toward **premium branding opportunities for Wyoming lamb**



Sheep Innovators Exchange Tours (Wyoming → New Zealand)

Bringing the Value Home

- **Extension Innovators Tour (May 2025)**
 - 5 UW Extension Sheep Task Force members
 - 8-day program with B+LNZ educators
 - Structured curriculum reflection + evaluation
- **Young Rancher Innovators Exchange (July 2025)**
 - 10 early-career Wyoming sheep producers
 - Genetics operations, cadet farms, stud farms, processing facilities, wool marketing
 - Survey results showed strong learning outcomes and replicability



*Jointly Funded: Wyoming Wool Initiative, Wyoming Business Council, University of Wyoming Global Engagement

Sheep Extension Innovators Exchange Tours (Wyoming → New Zealand)

Bringing the Value Home



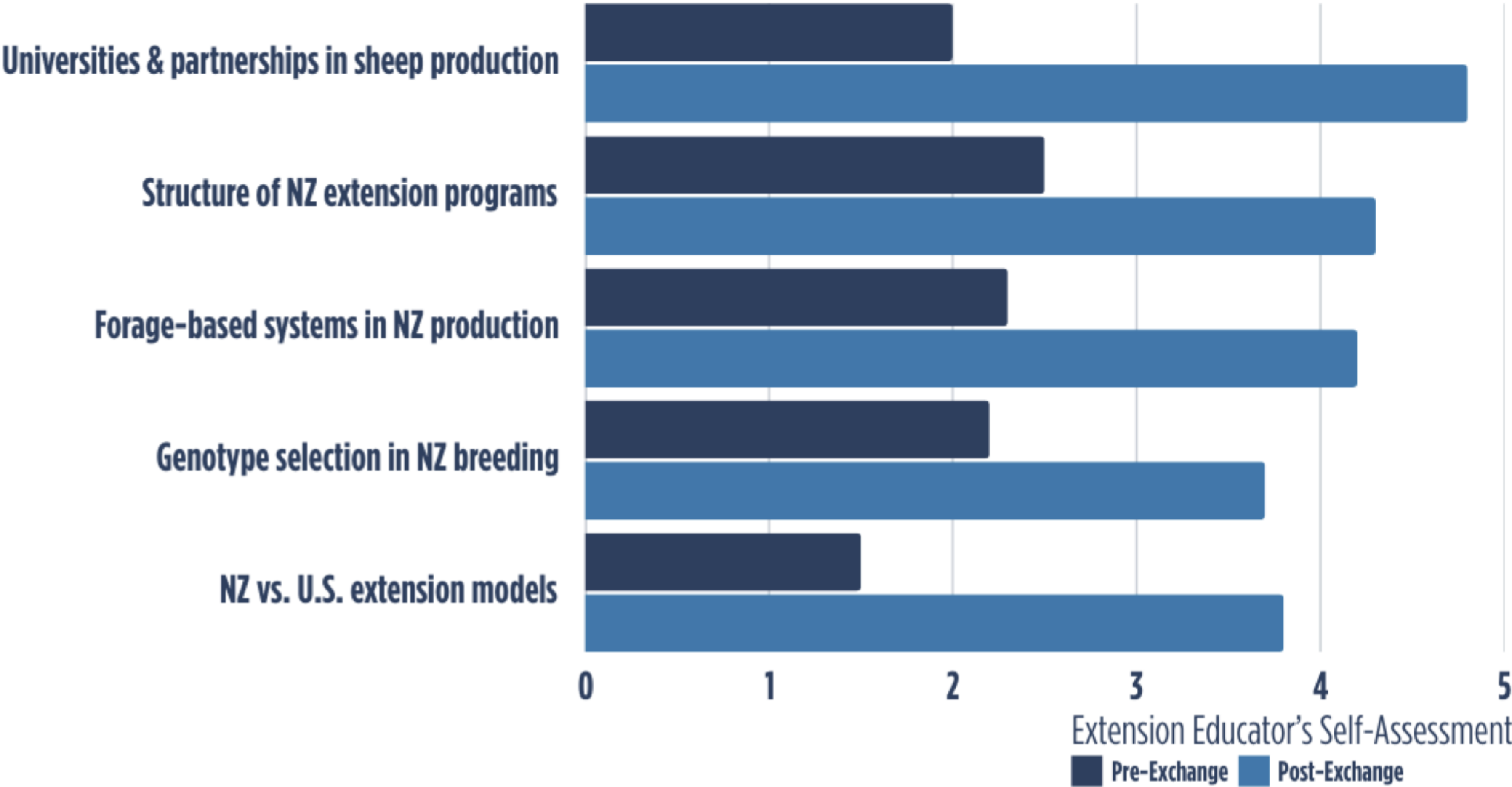
“Every day was amazing and made an impact in my thoughts and plans for the future. Our discussions with Beef + Lamb and NZ Merino inspired me and has made me think about how we can improve how UW Extension connects with our producers.”

“It became clear that data collection, and reporting is extremely important — it’s not just a family farm but rather a multi million dollar operation that we are dealing with. Treating it as such makes for a more successful model.”



“The opportunity to expand my current mindset through international travel was revolutionary. Too often we are stuck in the same echo chamber, and hearing other narratives is important to have a better perception.”

Knowledge Gains Among Extension Educators: Pre & Post Exchange Survey



Sheep Innovators Exchange Tours (Wyoming → New Zealand)

Bringing the Value Home



“The most valuable insight during the exchange was seeing the strength in building a community that can assist in the overall well-being of the individual producer. Life needs to be in balance, and by becoming more efficient through a variety of tools, we can maximize not only livestock production goals but overall health goals.”

UW Sheep Innovators Exchange: Participant Learning Assessment

Recruiting & retaining ranch employees

Employee pay & incentives

Building key operation skills

Marketing lamb as premium

Carcass quality targets

Forage systems & production goals

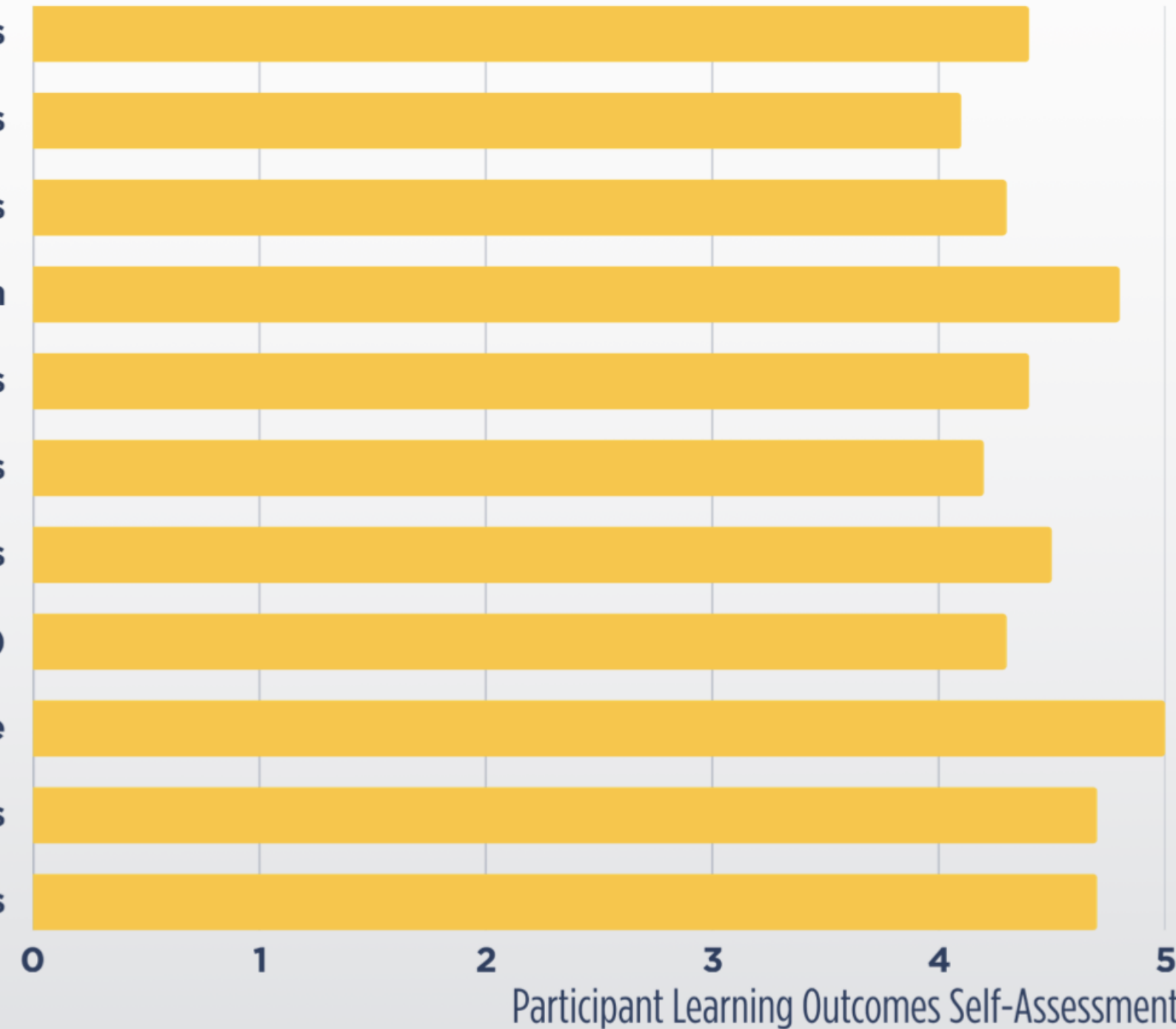
Alternative cool-season grasses

Land conversion impacts (NZ)

NZ vs. U.S. lamb infrastructure

Selecting rams & ewes

Corporate sheep farm practices



Profoundly Beneficial Personally and Professionally

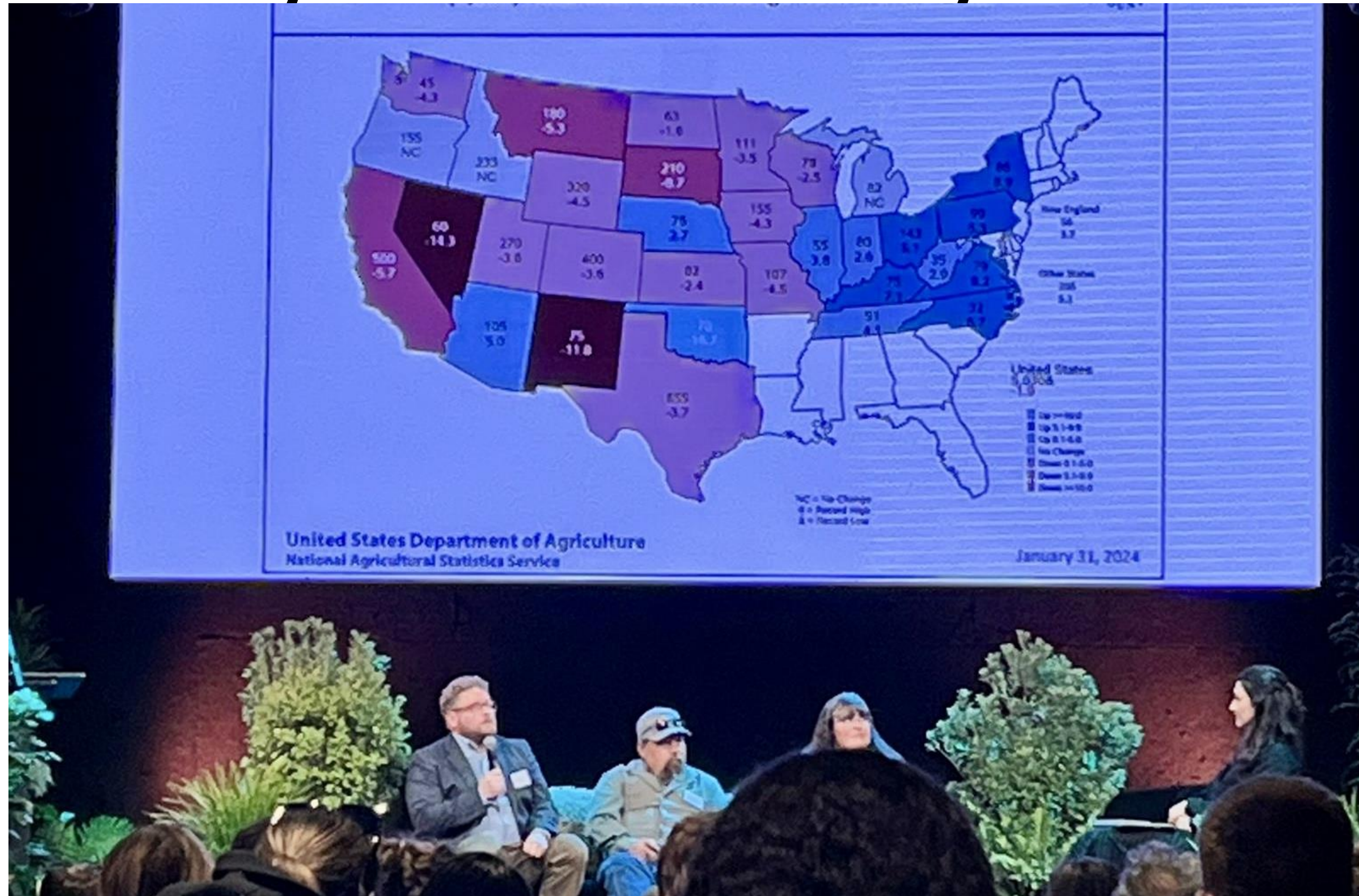


Meeting Minister of Wool at NZ Wool Classers Field Day



Meeting NZ Prime Minister at a Farm Show

Profoundly Beneficial Personally and Professionally



A conversation with Wyoming ranchers at the Lumina Lamb Muster, as part of the Innovators Exchange Tour.

Sabbatical Return on Investment

This sabbatical strengthened Wyoming sheep systems by importing:

- more effective extension outreach
- experiential teaching innovations
- Grazing, animal health, technology adaption
- market innovation strategies for lamb and wool
- Jumpstarted innovator exchange program (2027-Chile)



Questions

