

# Increasing Prosperity for Small Farms

## Sustainable livestock production, processing, and marketing

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Linking Community  
Priorities with  
University Resources  
for a Vibrant Idaho

**University of Idaho**  
Office of Community Partnerships

**Goal:** Increase revenues for small livestock producers and maximize economic benefits to rural economies

## Research Components

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- Supply and willingness to participate
- Potential business models
- Consumer interest and price sensitivity
- Environmental benefits and tradeoffs
- Distribution and marketing strategies
- Economic impacts
- Feasibility of strategies



# Project Team

## Office of Community Partnerships

→ Darin Saul, Debbie Gray

## Sustainability Center

→ Jennifer Boie

## Business & Economics

→ Steve Peterson, Tracie Lee

→ Nestor Guzman, Casey Hayward

→ Steve Shook

## Conservation Social Sciences

→ Nick Sanyal

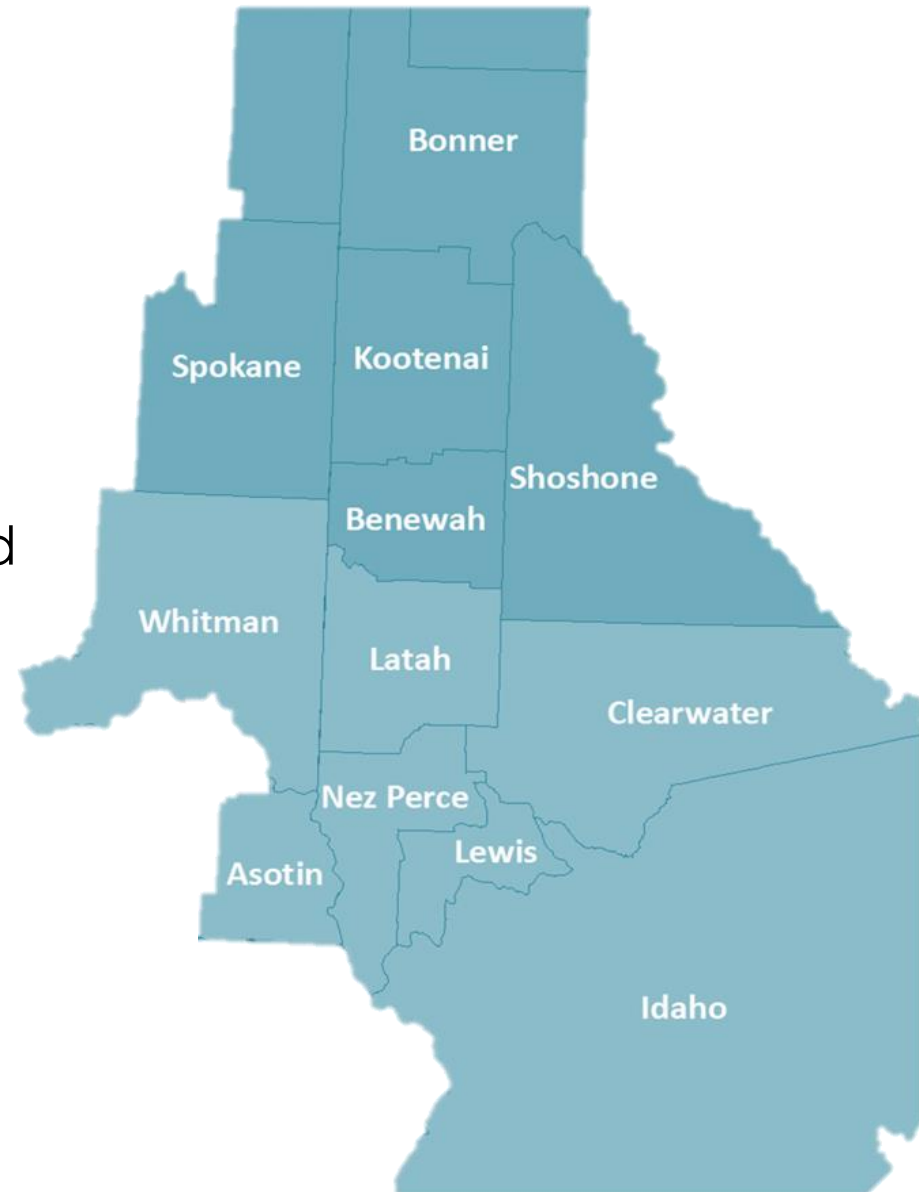
## Agricultural and Life Sciences

→ Dev Shrestha, Danny Roop

→ Stephen Devadoss

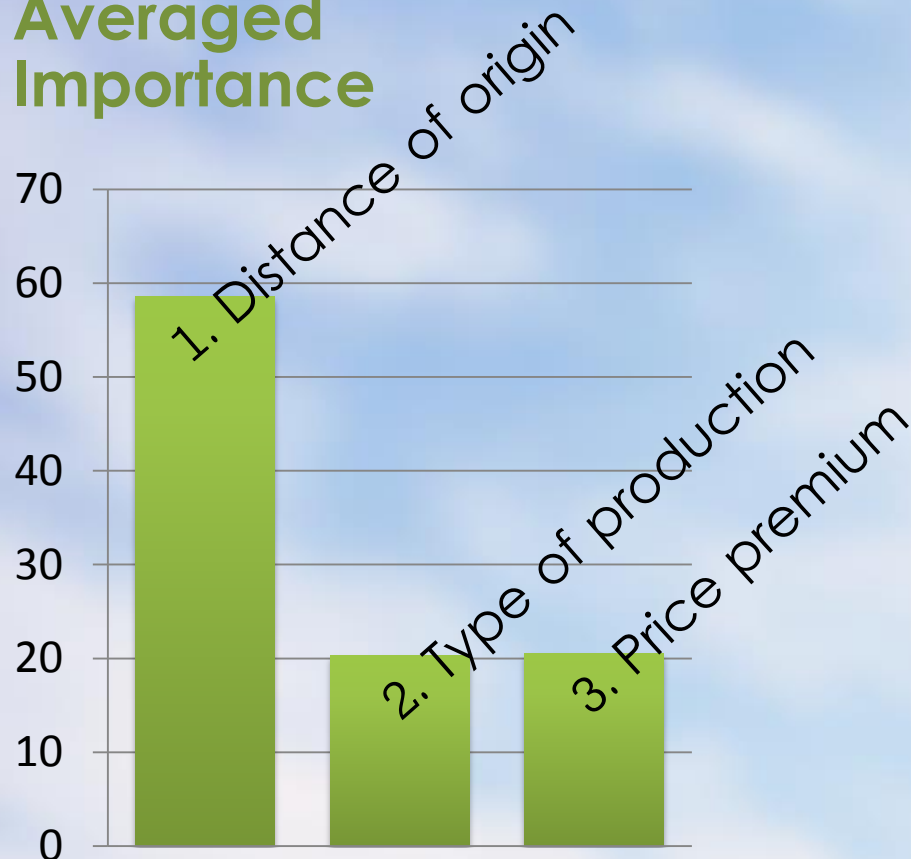
→ Cinda Williams, Ron Richard

# Study Area



# Consumer Interest

## Averaged Importance



## 1. Study area

- Eastern Washington
- North Idaho
- North Central Idaho

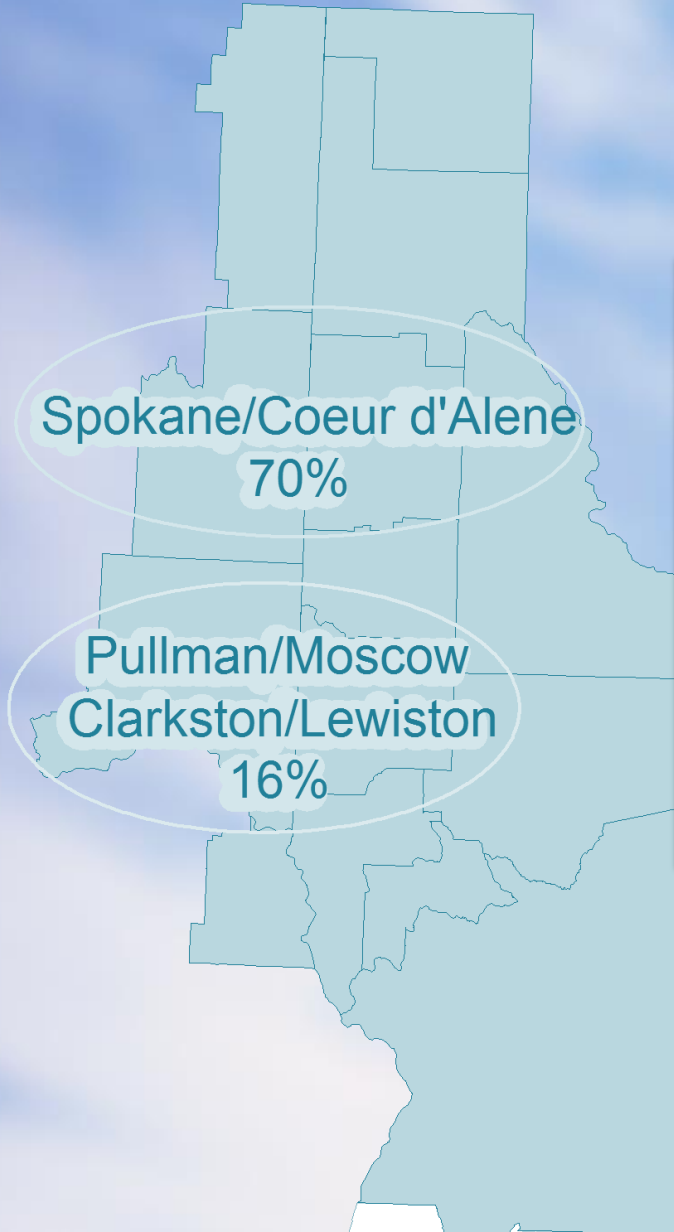
## 2. Method of study

- Conjoint analysis

## 3. Findings

- Natural vs. Conventional
- Pay less vs. Pay more
- Locally grown = 85 miles

# Markets



## Beef Cooked at Home (\$241/household)

	Population	Households	Total \$ Beef
<b>AFRI Region</b>	875,000	336,500	<b>\$81M</b>
<b>Spokane/CdA</b>	615,000	236,500	<b>\$57M</b>
<b>Idaho State</b>	1,585,000	609,600	<b>\$147M</b>
<b>Quad County</b>	144,000	55,500	<b>\$13M</b>

# Existing Processing

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Methods: Individual and group interviews

## Findings

- Continued decline in custom-exempt processors
- Bottlenecks: labor, cooler space and succession
- Additional capacity exists
- Need USDA-inspected carcasses



# Small Ranch Life Cycle Analysis

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## Findings:

- **13.78 ± 2.08** kg CO<sub>2</sub>e/kg live weight for small ranches
- **15.06–15.79** kg CO<sub>2</sub>e/kg live weight for large operations
- **80%** of GHG emissions from cattle
- **15%** from feed
- **5%** from transportation
- Highly variable for feed and transportation

# Economic Impact Analysis

- Alternatives generate 15 to 50 jobs, including multiplier effects
- Sizeable impacts in small rural communities
- Increase by factor of 2 to 3 if entire beef-production system local
- Local beef is important to overall integration of a local food system



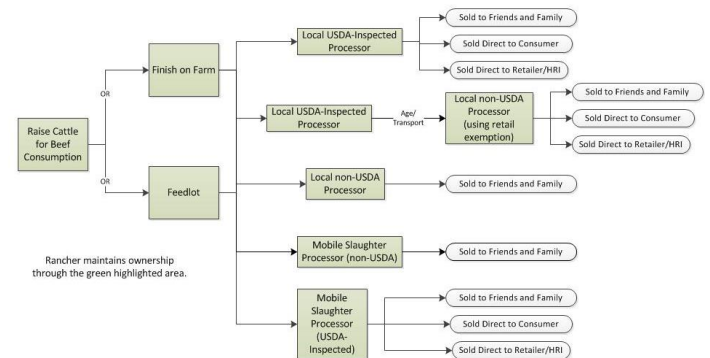
# Feasibility of Strategies

## Method: Weighted Factor Scoring Model

Criteria	Weight	Score	Weight*Score
$C_1$ : Dollars/lb created in community			
$C_2$ : Total CO <sub>2</sub> emissions			
$C_n \dots$			
			Total: _____

## Expected outcomes

- Scenario that optimizes existing capacity will be feasible
- Provide recommendation to working group



Most of these options could be for one rancher, several ranches, a co-operative, etc.  
HRI = hotels, restaurants, institutions

# Supply and Producer Interest

## Developing more livestock-processing options

- Very important **60%**
- Moderately important **28%**

## Preferred processing facility

- Fixed facility (USDA Inspected) **42%**
- On-farm or mobile-slaughter unit (USDA Inspected) **49%**

## Willingness to participate in creating

- Processing cooperative **93%**
- Marketing cooperative **88%**

# Willingness to Participate

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Methods: Surveys, interviews, group interviews

## Findings

- Plenty of animals
- Producer interest
- Viable strategies
- Detail-dependent feasibility
- Producer committee formed for next steps...

# University of Idaho 2012 Interdisciplinary Collaborative Efforts Excellence Awards

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