

## PROJECT SUMMARY: STRATEGIES TO INCREASE PROSPERITY FOR SMALL FARMS THROUGH SUSTAINABLE LIVESTOCK PRODUCTION, PROCESSING AND MARKETING



**Study region**

### PROJECT GOAL

Between February 2011 and January 2013, U-Idaho faculty and students studied local and regional livestock production, processing and marketing methods to find ways to increase revenues for small-scale livestock producers and maximize economic benefits to local rural economies in northern Idaho and eastern Washington. The study focused on:

- ◆ strategies for increasing the profitability of small and medium-sized livestock operations;
- ◆ supply and demand for local and other niche markets; and
- ◆ strategies for creating jobs and investment opportunities in rural communities.

### REPORT HIGHLIGHTS

This report focuses on research findings of interest to producers in the study area. Major findings include:

- ◆ Consumer interest supports development of a locally-oriented beef economy.
- ◆ The region's current livestock processors do not have the capacity to meet growing local demand for small-scale meat processing.
- ◆ There is sufficient producer willingness to support expansion of small-scale meat processing.
- ◆ There is sufficient livestock supply to support expansion of a variety of small-scale meat processing options.
- ◆ Many producers would prefer to expand availability of USDA-inspected processing, with either stationary or mobile slaughter options.
- ◆ The majority of producers are interested in developing processing or marketing cooperatives.
- ◆ Building new processing capacity will have more economic impact if located in the region's very small towns rather than in larger towns and cities.

# CONSUMER, PRODUCER & PROCESSOR ATTITUDES

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## EMERGING LOCAL BEEF NICHE MARKETS

Growing consumer demand for locally produced meat presents an opportunity for small-scale livestock producers to take advantage of emerging local beef niche markets, which offer higher profits than selling animals at auction.

To take full advantage of this growing demand, producers need more small-scale meat processing. Currently, no substantial local feedlot or USDA-inspected processing infrastructure occurs in the area, and only two small USDA-inspected meat processing facilities occur in the area (Moscow and Sandpoint).

This study explored the possibilities for expanding small-scale meat processing through the eyes of consumers, producers and processors.

## CONSUMERS

Surveys of local consumers in northern Idaho and eastern Washington revealed support for local beef production:

- ◆ Consumers' beef choice is most influenced by distance of origin. They have a strong preference for beef produced within 85 miles of home.
- ◆ Consumers are willing to pay 10% more for certified organic and all natural beef.
- ◆ Locally branded and marketed beef, either certified organic or all-natural, is likely to yield the highest price premium for area livestock producers.

## PRODUCERS

To better understand local producers' perspectives on developing local livestock processing capacity, information was gathered through producer forums, interviews and surveys. Research findings help answer several questions related to small-scale meat processing.

*What constraints do livestock producers experience?*

Producers' interest in expanding small-scale USDA-inspected processing is motivated by the perception that increased processing capacity will help producers overcome current constraints:

- ◆ inadequate access to USDA-inspected processing options within a reasonable distance;
- ◆ the amount of time required to direct market;
- ◆ inadequate income to support multigenerational families; and
- ◆ a mismatch between seasonal availability of livestock and times of unutilized capacity at existing processors.

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In addition, most small producers currently sell their livestock at auction. While many producers are interested in alternatives, many do not have the ability to finish animals to slaughter weight. Additional finishing capacity will also need to be developed.

*What processing options are livestock producers interested in pursuing and why?*

- ◆ Most producers—88%—think it is moderately or very important to develop additional processing options in the region.
- ◆ To increase local processing capacity, producers prefer USDA-inspected mobile slaughter, followed closely by building a stationary USDA-inspected facility. Producers with operations selling fewer than 200 head each year are most interested in USDA-inspected processing.

*Are a sufficient number of producers willing to participate in efforts to expand local processing capacity?*

- ◆ Most producers are willing to participate in a processing cooperative—93%—or marketing cooperative—88%.
- ◆ An eight-member steering committee of livestock producers formed and recruited 26 additional producers for a livestock processing cooperative working group.
- ◆ This group will build upon the study’s research to develop a detailed business plan, seek financing and take other steps toward successful implementation of new small-scale USDA-inspected processing.

## **PROCESSORS**

Interviews with local livestock processors provided insight into current processing capacity and possibilities for cooperative ventures to increase capacity:

- ◆ Most processors think available processing capacity is inadequate to respond to the growing market and producers’ demand for USDA-inspected livestock products.
- ◆ Processors do not plan to expand to meet the growing demand.
- ◆ Local custom-exempt processors are not interested in becoming USDA-inspected, but they are supportive of working with producers to develop a new business model and new capacity.
- ◆ Custom-exempt processors agreed that expanding small-scale, USDA-inspected processing capacity would benefit the region and would not hurt existing business since it would likely serve a different market.

# LIVESTOCK SALES TO SUPPORT EXPANDED MEAT PROCESSING

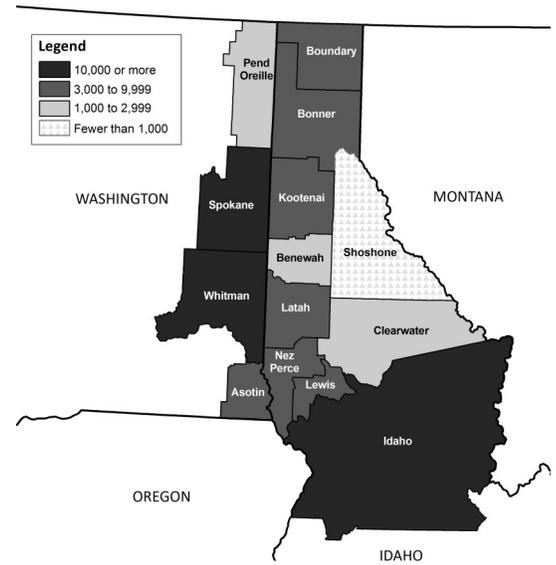
Sales data indicate that the region's small producers sell enough livestock to support expansion of local small-scale meat processing.

## CATTLE & CALVES

Cattle make up the majority of the region's livestock sold for meat production. In 2007:

- ◆ About 75,000 cattle and calves were sold, with two-thirds of these sales originating in the southern part of the region.
- ◆ The study region had a concentration of small producers. Sales of cattle by operations selling fewer than 200 head far exceeded sales by larger operations. In the northern region, smaller operations accounted for about 80% of sales, and in the southern region, they accounted for about 60% of sales. In comparison, smaller operations accounted for only 14% of sales in Idaho and 29% in the U.S..
- ◆ Sales by smaller operations were highest in Idaho (11,000), Spokane (8,300), Whitman (4,800) and Nez Perce (4,300) counties.

## LIVESTOCK SOLD, (# CATTLE EQUIVALENTS), 2007



SOURCE: U.S. Department of Agriculture

## OTHER LIVESTOCK & CATTLE EQUIVALENTS

Any increase in processing capacity must address seasonal availability of livestock to support a balanced supply of livestock to the processor. Processing other livestock, such as sheep and hogs, can help.

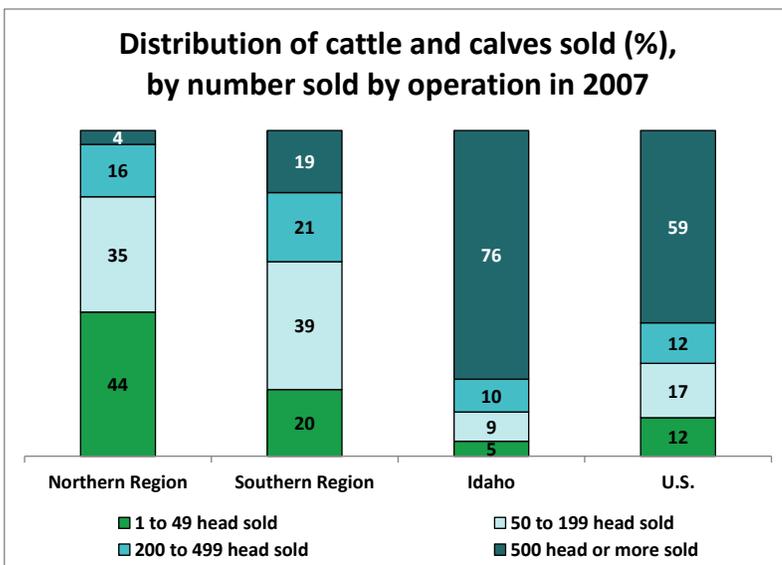
In 2007, about 9,800 sheep and 23,000 hogs were sold in the study region. Sheep sales were highest in Latah

(2,100) and Whitman (2,900) counties, while hog sales were highest in Kootenai (2,600) and Whitman (13,900) counties. *Note that USDA withheld data for some counties.*

One way to measure capacity for meat processing is to convert livestock to cattle equivalents. One cattle equivalent is the same as three hogs or six sheep.

In 2007, the number of cattle equivalents sold (cattle and calves, sheep and hogs combined) measured about 84,700. Again, two-thirds originated in the southern part of the region.

Distribution of cattle and calves sold (%), by number sold by operation in 2007



SOURCE: U.S. Department of Agriculture

## REGIONAL LIVESTOCK SLAUGHTER & PROCESSING OPTIONS

Many processing options were assessed as part of this study. It was found that:

- ◆ There is enough livestock raised in the study area, especially the southern portion, to support processing options requiring 2,400-16,000 animals, depending on demand.
- ◆ There is enough livestock supply to support options requiring more animals, but the risk is higher.
- ◆ Processing capacity could be enhanced by the region's supply of sheep, hogs and goats, which could support a more balanced seasonal supply to processors.

### PROCESSING SCENARIOS & MARKETS SERVED

Scenario	Description	Market
Stationary slaughter and processing by custom-exempt processor	<ul style="list-style-type: none"> <li>· Slaughter not USDA-inspected</li> <li>· Slaughter, aging, &amp; processing at custom-exempt plant</li> </ul>	<ul style="list-style-type: none"> <li>· Family &amp; friends can buy animal while it is still alive</li> </ul>
Stationary USDA-inspected slaughter & processing plant	<ul style="list-style-type: none"> <li>· Slaughter, aging, and processing at USDA-inspected plant</li> <li>· USDA inspector observes slaughter</li> </ul>	<ul style="list-style-type: none"> <li>· Family &amp; friends</li> <li>· Direct to consumer</li> <li>· Direct to retailer</li> <li>· Direct to HRI *</li> </ul>
Stationary USDA-inspected slaughter & custom-exempt processing under state retail exemption	<ul style="list-style-type: none"> <li>· Slaughter at USDA-inspected plant</li> <li>· Carcass transported to storage facility for dry-aging</li> <li>· Carcass transported to custom-exempt plant (state allows minimal processing—e.g., hamburger—for retail and HRI under exemption)</li> <li>· Meat cannot be resold (e.g., by grocery store to consumer)</li> </ul>	<ul style="list-style-type: none"> <li>· Family &amp; friends</li> <li>· Direct to consumer</li> <li>· Direct to HRI</li> </ul>
Mobile slaughter & stationary processing by custom-exempt processor	<ul style="list-style-type: none"> <li>· Producer hires custom-exempt processor to do slaughter on-farm using mobile slaughter unit</li> <li>· Slaughter not USDA-inspected</li> <li>· Aging and processing at custom-exempt plant</li> </ul>	<ul style="list-style-type: none"> <li>· Family &amp; friends can buy animal while it is still alive</li> </ul>
Mobile USDA-inspected slaughter & USDA-inspected processing	<ul style="list-style-type: none"> <li>· USDA-inspected mobile slaughter unit used to slaughter on-farm</li> <li>· USDA inspector observes slaughter</li> <li>· Aging and processing at USDA-inspected plant</li> </ul>	<ul style="list-style-type: none"> <li>· Family &amp; friends</li> <li>· Direct to consumer</li> <li>· Direct to retailer</li> <li>· Direct to HRI</li> </ul>
Mobile USDA-inspected slaughter & custom-exempt processing under retail exemption	<ul style="list-style-type: none"> <li>· USDA-inspected mobile slaughter unit used to slaughter on-farm</li> <li>· USDA inspector observes slaughter</li> <li>· Aging and processing at custom-exempt plant</li> <li>· Meat cannot be resold (e.g., by grocery store to consumer)</li> </ul>	<ul style="list-style-type: none"> <li>· Family &amp; friends</li> <li>· Direct to consumer</li> <li>· Direct to HRI</li> </ul>

\* HRI = hotels, restaurants, institutions

## EXAMPLES OF SMALL-SCALE MEAT PROCESSORS IN THE PACIFIC NORTHWEST

Processor	Location	Description	Capacity
<b>Puget Sound Meat Producers Cooperative (PSMPC)</b>	Western WA (King, Kitsap, Lewis, Mason, Pierce, & Thurston counties)	<ul style="list-style-type: none"> <li>· 45' MSU*</li> <li>· USDA-inspected</li> <li>· Slaughter &amp; delivery of carcasses to cut &amp; wrap facility (can be taken to USDA-inspected plants or sold custom- or retail-exempt)</li> </ul>	<ul style="list-style-type: none"> <li>· 8-10 animal units** per day</li> <li>· Operates based on demand (e.g., 90 operation days in 2012)</li> </ul>
<b>Island Grown Farmers' Cooperative (IGFC)</b>	San Juan County, WA	<ul style="list-style-type: none"> <li>· 34' MSU and 3000 sq ft plant</li> <li>· USDA-inspected</li> </ul>	<ul style="list-style-type: none"> <li>· 9-10 animal units or 2,500 lbs per day</li> <li>· 52 weeks per year</li> </ul>
<b>Garfield Meats</b>	Garfield, WA	<ul style="list-style-type: none"> <li>· Not USDA-inspected</li> <li>· Custom-exempt MSU for on-farm slaughter</li> <li>· Aging &amp; processing at custom-exempt plant</li> </ul>	N/A
<b>Sonnen's Meats</b>	Greencreek, ID	<ul style="list-style-type: none"> <li>· Not USDA-inspected</li> <li>· Custom-exempt plant</li> </ul>	N/A
<b>Wood's Meats</b>	Sandpoint, ID	<ul style="list-style-type: none"> <li>· 8000 sq ft plant</li> <li>· USDA-inspected</li> <li>· Value-added products</li> </ul>	<ul style="list-style-type: none"> <li>· 25 cattle per week (900 per year)</li> <li>· 35 hogs per week (1600 per year)</li> <li>· 12 goats/sheep per year</li> <li>· Steady business throughout year</li> </ul>
<b>Cattle Producers of Washington (CPoW) Livestock Processors Cooperative Association (LPCA)</b>	Odessa, WA	N/A	<ul style="list-style-type: none"> <li>· 40 animal units per day</li> </ul>

\* MSU = Mobile Slaughter Unit

\*\* 1 animal unit = 1 cow, 2 hogs, 3 sheep, or 3 goats

(CONTINUED)

Processor	Number of Employees	Annual Revenues	Annual Operating Costs	Start-up Costs	Funding Source
<b>Puget Sound Meat Producers Cooperative (PSMPC)</b>	<ul style="list-style-type: none"><li>· None</li><li>· PSMPC board members do bookkeeping &amp; scheduling on volunteer basis</li></ul>	\$11,000	\$57,000	\$500,000	<ul style="list-style-type: none"><li>· PSMPC membership</li><li>· Conservation District loan</li><li>· Fee for service</li></ul>
<b>Island Grown Farmers' Cooperative (IGFC)</b>	<ul style="list-style-type: none"><li>· 6 employees</li></ul>	\$300,000	\$290,000	\$320,000	<ul style="list-style-type: none"><li>· Grants (e.g., USDA, CREES, Forest Service)</li><li>· Private donations</li><li>· Fee for service</li></ul>
<b>Garfield Meats</b>	<ul style="list-style-type: none"><li>· 4 employees</li></ul>	N/A	\$118,000	N/A	<ul style="list-style-type: none"><li>· Fee for service</li></ul>
<b>Sonnen's Meats</b>	<ul style="list-style-type: none"><li>· 1 full time; 4 part time employees</li></ul>	N/A	\$101,500	N/A	<ul style="list-style-type: none"><li>· Fee for service</li></ul>
<b>Wood's Meats</b>	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"><li>· Fee for service</li></ul>
<b>Cattle Producers of Washington (CPoW) Livestock Processors Cooperative Association (LPCA)</b>	N/A	N/A	N/A	N/A	<ul style="list-style-type: none"><li>· LPCA membership</li><li>· Fee for service</li></ul>

SELECTED INDICATORS	Northern AFRI Region	Southern AFRI Region	AFRI Region Total	Idaho State	United States
<b>LIVESTOCK SALES</b>					
Number, 2007					
Cattle equivalents	27,140 *	57,519 *	84,659 *	1,888,076	144 million
Cattle and calves	24,680	50,540 *	75,220 *	1,829,456	74 million
Hogs	6,008	17,416 *	23,424 *	65,618	207 million
Sheep	2,743*	7,040 *	9,783 *	220,481	5 million
<b>DISTRIBUTION OF CATTLE AND CALVES SOLD</b>					
Number sold by operation, 2007:					
1 to 49 head	10,289 *	10,218	20,507 *	84,284	9 million
50 to 199 head	8,215 *	19,588 *	27,803 *	163,964	12 million
200 to 499 head	3,733 *	10,608 *	14,341 *	184,870	9 million
500 head or more	1,000 *	9,505 *	10,505 *	1,396,338	44 million
<b>OPERATIONS WITH LIVESTOCK</b>					
Number, 2007					
Operations with beef cows	1,182	917	2,099	7,365	765 thousand
Operations with other cattle, non-dairy **	1,179	977	2,156	8,815	789 thousand
Operations with hogs	210	59	269	657	75 thousand
Operations with sheep	303	174	477	1,210	83 thousand
<b>DISTRIBUTION OF BEEF COW SUPPLY</b>					
Size of operation, 2007:					
1 to 49 head	10,135 *	8,820 *	18,955 *	64,999	9 million
50 to 199 head	6,804 *	18,736	25,540 *	120,602	11 million
200 to 499 head	3,924 *	11,909	15,833 *	130,971	7 million
500 head or more	500 *	3,770 *	4,270 *	159,720	5 million

**NOTE:** 2012 data will be available in February 2014.

\* Asterisks indicate a region total that includes at least one county estimate. The U.S. Department of Agriculture does not provide data where it would be easy for the public to predict the number of animals owned by an individual operator. In these cases, we have estimated the MINIMUM number of animals for a county or region when possible. Actual numbers are higher.

\*\* "Other cattle, non-dairy" refers to heifers that have not calved, steers, calves and bulls. It does not include milk cows.

**DATA SOURCE:** U.S. Department of Agriculture (Census of Agriculture)—<http://www.agcensus.usda.gov/Publications/2007/index.php>; Saul, D., S. Newman, T. Lee, S. Peterson, S. Devadoss, and D. Shrestha. Forthcoming. Developing strategies to increase prosperity for small farms through sustainable livestock production, processing, and marketing,

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