Coeur d’Alene Reservation
Local Farm & Food Economy

by Ken Meter, Crossroads Resource Center (Minneapolis)
for
Benewah Medical & Wellness Center

January 2, 2017

Data compiled from The Coeur d’Alene Tribe GIS
custom data sets covering Benewah and Kootenai Counties;
the communities of De Smet, Plummer & Worley, and
Census Tracts 16009940000 & 16055940000 of Idaho.
(That is, Benewah County Tract 94 & Kootenai County Tract 94)

Data from the U.S. Federal Government is included for completeness
although it does not always provide as much detail as Tribal data

Photos Courtesy of Coeur d’Alene Tribe.
Extensive GIS research and analysis of production on tribal land by Sabine Krier, Coeur d’Alene Tribe.
Quantitative research assistance provided by Joshua Miner.
GIS Maps by Legion GIS.
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Coeur d’Alene Reservation

$435 million leaks out of Benewah & Kootenai Counties each year!

Commodity farmers lose $10 million each year

Tribe owns 79,823 acres of farmland. 5,509 acres in Tribal farm. Only 141 acres owned by individual Native Americans.

Two opportunities for Food Sovereignty

Broader region

Tribal lands
Executive Summary

The Coeur d’Alene Tribe’s determined effort to maintain sovereignty suggests it should build greater self-sufficiency in food, since no people can be sovereign if most of their food is produced by others. Building a tribal food system is a critical strategy for gaining greater sovereignty; yet significant challenges exist.

Although the Tribe owns 79,839 acres of land, 53% of which (42,295 acres) is in agricultural use, most tribal farmland (86%, or 36,785 acres) is operated by nontribal members, Tribal data show. Farmland is largely devoted to export crops such as wheat and lentils, not to feeding Tribal members. The Coeur d’Alene Tribe’s 5,509-acre farm produces wheat, dry beans, lentils, peas, barley, and forage, and most of these crops are sold as commodities to distant markets.

While the Census of Agricultural counts are likely to be incomplete, this source states that only 7 farms on the Reservation are operated by individual Native Americans. These cover a total of only 141 acres. Still, these farms are important to the Tribe’s quest for sovereignty, since they are well placed to respond to the food needs of Tribal people. Yet few owners are full-time farmers. With 156,444 residents of Benewah and Kootenai Counties eating about $432 million of food each year, the tribe may find business opportunities in feeding nearby residents, both Tribal and nontribal.

Moreover, even nonreservation farmers in the two counties face economic uncertainty, especially today when wheat prices have declined to about $4.50 per bushel after standing as high as $7.50 only three years ago. Data from the Bureau of Economic Analysis show that farmers in the two counties have spent an average of $10 million each year more in producing crops and livestock than they earned by selling their products. Farm production costs exceeded cash receipts for 23 years of the 26-year period 1989 – 2014. They have suffered losses each year since 1993. Moreover, 67% of the region’s farms reported that they lost money in 2012 (US Census of Agriculture), and farmers in the two counties earned $26 million less by selling commodities in 2014 than they earned in 1969 (in 2014 dollars; BEA).

Farmers do have other sources of income—primarily off-farm jobs—yet these turn out to be far more lucrative than farming itself. Farmers in the two counties earn an average of $8 million per year of farm-related income — primarily custom work and rental income (25-year average for 1989-2014). Federal farm support payments are also an important source of net income, averaging $5 million per year over the same years.

The great disconnect in the two-county region food system is shown by the fact that consumers spend about $400 million per year purchasing food sourced outside the two counties, while farmers work at sparse margins. Only $494,000 of food products (0.01% of farm cash receipts and 0.1% of the region’s consumer market) are sold by farmers directly to consumers.

Overall, $435 million leaks out of the two-county area each year. This loss amounts to ten times the value of all food products raised by the region’s farmers. Moreover, the two counties spend a significant share of the $1 billion that is spent by Idaho residents paying for medical care for diabetes and related illnesses.
Coeur d'Alene Reservation Elevation

Sources:
USGS The National Map 30M 3DEP (2013)
USGS National Land Cover Dataset (2011, amended 2014)
US Census Bureau TIGER/Line Urban Areas (2010)
NRCS State & County Bounds (2002)
Projected in NAD83/UTM Zone 11 @ 1:300,000
Geospatial services by Legion GIS, LLC

Elevation (ft):
- High: 1272
- Low: 648

Land Cover:
- Coeur d'Alene Reservation
- Communities & Urban Areas
- Open Water
Coeur d'Alene Reservation Land Cover

Sources:
USGS The National Map 30M 3DEP (2013)
USGS National Land Cover Dataset (2011, amended 2014)
US Census Bureau TIGER/Line Urban Areas (2010)
NRCS State & County Bounds (2002)
Projected in NAD83/UTM Zone 11 @ 1:300,000
Geospatial services by Legion GIS, LLC
Native American Population for geographies of interest to Coeur d’Alene Tribal People

<table>
<thead>
<tr>
<th>Counties</th>
<th>Benewah</th>
<th>9,118</th>
<th>1,091</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kootenai</td>
<td>147,326</td>
<td>3,660</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Communities</td>
<td>De Smet</td>
<td>184</td>
<td>174</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td>Plummer</td>
<td>1,041</td>
<td>513</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>Worley</td>
<td>213</td>
<td>86</td>
<td>40%</td>
</tr>
<tr>
<td>Census Tracts</td>
<td>Benewah1600994</td>
<td>4,374</td>
<td>1,016</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>Kootenai1605594</td>
<td>2,547</td>
<td>592</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>Both Tracts</td>
<td>6,921</td>
<td>1,608</td>
<td>23%</td>
</tr>
</tbody>
</table>

### Poverty rates in Coeur d’Alene Communities:

<table>
<thead>
<tr>
<th>Population</th>
<th>B9400</th>
<th>K9400</th>
<th>Both tracts</th>
<th>De Smet</th>
<th>Plummer</th>
<th>Worley</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 50%</td>
<td>345</td>
<td>123</td>
<td>468</td>
<td>2</td>
<td>177</td>
<td>17</td>
</tr>
<tr>
<td>less than 100%</td>
<td>902</td>
<td>372</td>
<td>1,274</td>
<td>51</td>
<td>376</td>
<td>40</td>
</tr>
<tr>
<td>less than 125%</td>
<td>1,318</td>
<td>477</td>
<td>1,795</td>
<td>127</td>
<td>443</td>
<td>63</td>
</tr>
<tr>
<td>less than 150%</td>
<td>1,596</td>
<td>652</td>
<td>2,248</td>
<td>127</td>
<td>496</td>
<td>89</td>
</tr>
<tr>
<td>less than 185%</td>
<td>1,958</td>
<td>878</td>
<td>2,836</td>
<td>127</td>
<td>595</td>
<td>113</td>
</tr>
<tr>
<td>less than 200%</td>
<td>2,038</td>
<td>1,067</td>
<td>3,105</td>
<td>127</td>
<td>610</td>
<td>118</td>
</tr>
<tr>
<td>200% or greater</td>
<td>2,323</td>
<td>1,480</td>
<td>3,803</td>
<td>57</td>
<td>427</td>
<td>95</td>
</tr>
</tbody>
</table>

Percent less than 185%: 45% 34% 41% 69% 57% 53%

*Source: Federal Census of 2010 -2014.*

### Census Tracts 16009940000 (Benewah County Tract 94) & 16055940000 (Kootenai County Tract 94)

#### Household income in Tracts Benewah 94 and Kootenai 94, 2010 - 2014

*Source: Federal Census of 2010 -2014.*
# Farming on the Coeur d’Alene Reservation

2015 Data from Coeur d’Alene Tribe GIS, including tribal land records and public data from USDA available at [http://nassgeodata.gmu.edu/CropScape/](http://nassgeodata.gmu.edu/CropScape/)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Total Acreage</th>
<th>Farmed by Tribal Farm</th>
<th>Farmed by Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Wheat</td>
<td>17,121</td>
<td>1,767</td>
<td>15,353</td>
</tr>
<tr>
<td>Spring Wheat</td>
<td>8,998</td>
<td>2,353</td>
<td>6,645</td>
</tr>
<tr>
<td>Lentils</td>
<td>6,413</td>
<td>411</td>
<td>6,002</td>
</tr>
<tr>
<td>Other Hay/Not Alfalfa</td>
<td>2,222</td>
<td>29</td>
<td>2,192</td>
</tr>
<tr>
<td>Sod/Grass Seed</td>
<td>2,106</td>
<td>6</td>
<td>2,100</td>
</tr>
<tr>
<td>Dry Beans</td>
<td>1,758</td>
<td>509</td>
<td>1,249</td>
</tr>
<tr>
<td>Peas</td>
<td>1,137</td>
<td>191</td>
<td>946</td>
</tr>
<tr>
<td>Fallow Cropland</td>
<td>1,060</td>
<td>223</td>
<td>837</td>
</tr>
<tr>
<td>Barley</td>
<td>661</td>
<td>12</td>
<td>649</td>
</tr>
<tr>
<td>Grass/Pasture</td>
<td>270</td>
<td>2</td>
<td>268</td>
</tr>
<tr>
<td>Other Crops</td>
<td>549</td>
<td>6</td>
<td>543</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Total (acres)</th>
<th>Tribal Farm</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>42,295</td>
<td>5,509</td>
<td>36,785</td>
</tr>
</tbody>
</table>

### Tribal Land within Reservation:

- Percent in agricultural use: 53%
- Total acreage: 79,839

### Nonagricultural uses

<table>
<thead>
<tr>
<th>Nonagricultural uses</th>
<th>Total Acreage</th>
<th>Tribal Farm</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>25,867</td>
<td>54</td>
<td>25,812</td>
</tr>
<tr>
<td>Shrubland</td>
<td>7,898</td>
<td>54</td>
<td>7,844</td>
</tr>
<tr>
<td>Developed</td>
<td>2,620</td>
<td>140</td>
<td>2,480</td>
</tr>
<tr>
<td>Open Water</td>
<td>1,158</td>
<td></td>
<td>1,158</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total (acres)</th>
<th>Tribal Farm</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>37,544</td>
<td>249</td>
<td>37,295</td>
</tr>
</tbody>
</table>
The following data does not always agree with data provided by the Tribe, but is listed here for comparison purposes. The data below is from Coeur d’Alene Reservation highlights (USDA NASS Census of Agriculture, 2012, and Official Coeur d’Alene Tribe Website http://www.cdatribe-nsn.gov/Default.aspx):

Census of Agriculture data for 2012 were released May 2, 2014

The Census of Agriculture defines a “farm” as “an operation that produces, or would normally produce and sell, $1,000 or more of agricultural products per year.”

Land & Farmers:

- The Coeur d’Alene Reservation contains 345,000 acres of land.
- This includes about 180,000 acres of forest.
- Most of the Reservation farmland is owned by private farmers.
- The Coeur d’Alene Tribe’s 6,000-acre farm produces wheat, barley, peas, lentils and canola.
- Reservation land also produces about 30,000 acres of Kentucky Blue Grass.
- The USDA Census of Agriculture counted 212 farms located on the reservation that hold 215,983 acres of land, both on and off the reservation. This is an average farm size of 1,019 acres, while the average Native American-operated farm was 20 acres.
- All farms listed as operated by Native Americans were smaller than 100 acres.
- 7 (3%) of the 212 farms were listed as “operated by American Indians,” who held 141 acres (0.07%) of land.
- None of these 7 Native American operators listed farming as their primary occupation; 4 lived away from the farm they owned.
- The average age of an Native American operator was 42, considerably younger than the Reservation (and national) averages of 57.
- 3 of the Native American operators have farmed less than 2 years, while 2 have farmed 10 years or more.
- 20 non-Native American operators have farmed less than 2 years, while 248 have farmed 10 years or more.
- One Native American operator reported not working off the farm; the other six worked 200 days or more off the farm.
- The Census of Agriculture also listed 82,302 acres (38%) as farmland that was contained within reservation boundaries. 112 acres of this land was operated by Native Americans.
- 3 Native American farmers own farms that are entirely contained by the reservation, while 99 non-Native American owners own farms entirely within the reservation.
- 55 total farms (26%) and 6 Native American-operated farms (86%) were under 50 acres.
- 36 farms (17%) were over 1,000 acres (none of these were Native American-operated).
- The most common farm size was 50 to 179 acres, with 72 farms (34%).
- The most common farm size among Native American-operated farms was 10 to 49 acres, with 5 farms.
Sales:

- Reservation farms were listed as selling $42 million of farm products in 2012, with $10,000 of these sales from Native American-operated farms.
- $41.4 million (98%) of these sales were crop sales.
- $802,000 (2%) of these sales were livestock and related products.
- 60% of all reservation farms (128) and 100% of Native American-operated farms (7) had less than $10,000 in total sales.
• 2 Native American-operated farms sold less than $1,000 of products, while 1 farm sold an amount between $5,000 and $9,999. Four other farms sold between $1,000 and $2,499 of products in 2012.
• Value of products sold by Coeur d’Alene Reservation farms was similar to the value of products sold by farms in the Benewah/Kootenai County region ($42 million vs. $47 million) as noted below.

**Production Expenses:**
• Farm production expenses were listed at $29 million for all reservation farms.
• Native American-operated farms spent a total of $40,000 in production expenses, meaning the 7 farms lost a total of $30,000 farming, or an average of $4,285 per farm.
• Main production expenses listed for all Reservation farms included:
  o $6.9 million of fertilizer, lime, and soil conditioners.
  o $3.9 million for chemicals.
  o $2.3 million for gasoline, fuels, and oils.
  o $2.1 million for hired labor.
  o $1.5 million in interest.
  o $268,000 for feed purchases.
  o $97,000 for livestock and poultry purchases or leases.
• Main production expenses listed for Native American-operated farms included:
  o $11,000 for feed purchases.
  o $8,000 for gasoline, fuels, and oils.
  o $7,000 for livestock and poultry purchases or leases.
  o $1,000 for chemicals.

**Grains, Dry Edible Beans, Oil Crops, & others:**
• 47 farms produced 3.7 million bushels of wheat on 58,372 acres.
• 22 farms raised 253,062 bushels of barley on 3,441 acres.
• 14 farms raised 82,863 bushels of oats on 824 acres.
• 2 farms raised dry edible beans, but acreage and production data were suppressed by USDA in an effort to protect confidentiality.
• None of this was raised by Native American-operated farms.

**Cattle & Dairy, and Other livestock & animal products:**
• 67 farms held an inventory of 1,893 cattle and calves.
• 3 of these farms were Native American-operated, holding an inventory of 12 cattle and calves.
• 11 milk cows were reported on 5 farms, including 3 Native American-operated farms.
• 42 farms sold 826 cattle and calves in 2012.
• 14 farms raised hogs and pigs, holding an inventory of 44.
• 3 Native American-operated farms held 12 of these hogs.
• 6 farms sold 10 hogs and pigs in 2012.
• 11 farms held an inventory of 173 sheep and lambs.
• 3 Native American-operated farms held an inventory of 9 of these sheep and lambs in 2012.
• 4 farms sold 44 sheep and lambs.
• 53 farms reported holding an inventory of 240 horses and ponies.
• 3 farms sold 5 horses and ponies.
• 9 farms held an inventory of 26 goats; none were reported sold.
• 3 of these farms raising goats were Native American-operated.
• 3 farms held an inventory of 116 bison, selling 29. None of these farms were Native American-operated.
• 36 farms held an inventory of 635 laying hens.
• 3 Native American-operated farms held 210 of these hens.
• 2 farms raised broilers, but inventory figures were suppressed by USDA in an effort to protect confidentiality.

Nursery, Landscape and Ornamental Crops:
• Not significant products for Reservation farmers.

Vegetables & Melons (some farmers state that Ag Census data do not fully represent vegetable production):
• 2 farms were listed as raising vegetables commercially, but acreage data were suppressed by USDA in an effort to protect confidentiality.
• None of these vegetable farms were Native American-operated.

Fruits (some farmers state that Ag Census data do not fully represent fruit production):
• No fruit farming was reported for the Reservation.
Direct & organic sales:
- No direct or organic sales were reported for the Reservation.

Conservation practices:
- 16 Reservation farms have placed 3,593 acres of land under conservation easements.
- 32 farms reported using no-till practices on 22,812 acres of land.
- 29 farms reported using other conservation practices on 35,395 acres of land.
- Conventional tillage methods were used by 50 farms covering 33,546 acres.
- 10 farms reported planting 1,410 acres of cover crops in 2012.
- None of the conservation practices reported were used by Native American-operated farms.

Operation and operator characteristics for Reservation farms:

<table>
<thead>
<tr>
<th>Category</th>
<th>Farms</th>
<th>Native American-operated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family or individual ownership</td>
<td>159</td>
<td>7</td>
</tr>
<tr>
<td>Partnership</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Corporation</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Other - cooperative, estate or trust, institutional, etc.</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Other natural resources & concerns listed by the Coeur d’Alene website:
- Logging is another important component of the economy and source of revenue for the tribe. Only selective cutting of forests is undertaken on tribal land. Clear cuts are banned.
- Tourism, including tribal gaming operations, continues to grow and impact the local and regional economy.
- The St. Joe River is one of North America’s premier trout streams, flowing from the Idaho-Montana line down to the south end of Lake Coeur d’Alene.
- The lower St. Joe is the highest navigable stream in the world, and a waterway for the tugboats that push giant log booms to lumber mills along the Spokane River far to the north.
- The Coeur d’Alene River, meanwhile, would be equally beautiful. However, it still suffers desperately from heavy metal pollution. One hundred years of silver, lead and zinc mining in Idaho’s Silver Valley resulted in the dumping of mine waste and tailings into the upper river and its tributaries. The 72 million tons of mine waste dumped into the basin also represent a deadly threat to Lake Coeur d’Alene. The Coeur d’Alene Tribe and the United States Government have each filed suit against the mining industry in an effort to restore the river and its watershed.
Benewah & Kootenai Counties (Bureau of Economic Analysis, 2014)
156,444 residents receive $5.7 billion of income annually. Personal income increased 547% from 1969 to 2014, after dollars were adjusted for inflation. The largest source of personal income is transfer payments (from government programs such as pensions), which accounts for $1.22 billion of personal income. Capital income (from interest, rent or dividends) totals $1.19 billion. Ranking third is government jobs, at $711 million. Health care workers earn $380 million, while retail workers earn $338 million. Manufacturing ranks sixth with $294 million of personal income, and construction workers earn $245 million. Note that income from public sources makes up 34% of all personal income in the region.

Income earned from transfer payments includes $546 million of retirement and disability insurance benefits; $437 million of medical benefits; $95 million of income maintenance benefits; $18 million of unemployment insurance; and $58 million of veterans’ benefits.

Government income includes $56 million of income earned by federal workers and $639 million earned by state and local government workers. Military personnel earn $17 million of personal income.

Although population has increased 280% since 1969, there has been only limited public planning to assure a secure and stable food supply.

Issues affecting low-income residents of Benewah and Kootenai Counties:
Over 49,000 residents (33%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. These lower-income residents spend an estimated $104 million each year buying food, including $13 million of SNAP benefits (formerly known as food stamps), (26-year average, 1989-2014) and additional WIC coupons. Some 300 of the two-county region’s 1,098 farmers receive an annual combined total of $5 million in subsidies (26-year average, 1989-2014), mostly to raise crops such as wheat that are sold as commodities, not to feed local residents. Data from Federal Census of 2010-2014, Bureau of Labor Statistics, & Bureau of Economic Analysis.

5% percent of Benewah and Kootenai County households (over 6,500 residents) earn less than $10,000 per year. Source: Federal Census of 2010-2014.

24% of Idaho adults aged 18-64 in carried no health care coverage in 2013. Source: Centers for Disease Control.

Food-related health conditions:
38% of the state’s residents reported in 2013 that they eat less than one serving of fruit per day. 20% eat less than one serving of vegetables. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. Many providers recommend consumption of at least five servings of fruit and vegetables each day, while others suggest even higher rates. Source: Centers for Disease Control.

20% of Idaho adults reported in 2013 that they get sufficient exercise each week to meet recommended guidelines. Source: Centers for Disease Control.
8.4% of Idaho residents have been diagnosed with diabetes as of 2013. *Source: Centers for Disease Control.* Medical costs for treating diabetes and related conditions in the state are estimated at $1 billion per year. *Source: American Diabetes Association.*

65% of Idaho residents were overweight (35%) or obese (30%) in 2013. *Source: Centers for Disease Control.*

### Farming in Benewah and Kootenai Counties

The Coeur d’Alene Reservation overlaps significantly with both Benewah and Kootenai Counties.

**Farms in Benewah and Kootenai Counties of Idaho (Census of Agriculture, 2012)**

*Census of Agriculture data for 2012 were released February 4, 2013*

**Land:**
- The two counties have 1,098 farms.
- This is a decrease of 2% from 2007 in the number of farms.
- The region holds 4% of Idaho’s farms.
- 51 (5%) of these were 1,000 acres or more.
- 577 (53%) were less than 50 acres.
- The most prevalent farm size was 10-49 acres, with a total of 395 (6%) farms.
• Average farm size was 247 acres, less than half of the Idaho average of 474 acres.
• The region holds 270,855 acres of farmland, 4% of the state’s farmland.
• This is a 5% decrease in acreage from 2007.
• 54% of the region’s farmland was cropland.
• 227 (21%) farms had a total of 14,691 acres of irrigated land.
• This irrigated land was 10% of the region’s total cropland.
• Average value of land and buildings per farm was $680,251 (35% lower than the State average of $1.05 million).

Sales (Note that there may be discrepancies between Ag Census data and Bureau of Economic Analysis data, below):
• The region’s farmers sold $48 million of crops and livestock in 2012.
• This was less than 1% of Idaho’s agricultural product sales.
• Sales increased 29% over the 2007 level of $37 million, largely due to higher wheat prices.
• Average per-farm sales in the region were $43,300, 86% below the State average of $314,372. This is heavily influenced by the low average sales among Kootenai County farmers.
• Crop sales totaled $43 million (90% of sales).
• This was $11 million (35%) more in sales than five years earlier.
• Livestock sales totaled $5 million (10%).
• This was $318,000 (6%) less in sales than in 2007.
• In 2012, 856 (78%) farms in the region sold less than $10,000 of products.
• These smaller farms had aggregate sales of $1.65 million, 3% of the region’s total farm product sales.
• In 2012, 64 farms (6%) in the region sold more than $100,000 of products.
• These larger farms had aggregate total sales of $40.4 million, 85% of the region’s farm product sales.
• 291 farms (27%) in the region received $2.6 million of federal payments in 2012. This was 3% of the total federal payments received in Idaho.
• 67% (739) of the region’s farms reported net losses in 2012 even after subsidies are taken into account. This is higher than the State average of 54%.

Top farm products of Benewah and Kootenai Counties, 2014
(Census of Agriculture, 2012)

<table>
<thead>
<tr>
<th>Product</th>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>23.108</td>
</tr>
<tr>
<td>Forage crops</td>
<td>*6.709</td>
</tr>
<tr>
<td>Oil seeds &amp; dry beans</td>
<td>5.575</td>
</tr>
<tr>
<td>Cattle &amp; calves</td>
<td>3.661</td>
</tr>
<tr>
<td>Nursery &amp; ornamentals</td>
<td>1.405</td>
</tr>
<tr>
<td>Barley</td>
<td>1.333</td>
</tr>
<tr>
<td>Vegetables</td>
<td>0.809</td>
</tr>
<tr>
<td>Other animals &amp; products</td>
<td>0.266</td>
</tr>
<tr>
<td>Hogs &amp; pigs</td>
<td>*0.252</td>
</tr>
</tbody>
</table>
Horses & ponies 0.230
Christmas Trees *0.121
Fruits 0.113
Sheep & goats 0.111
Poultry & eggs 0.041
Milk & dairy *

Note: “*” denotes that some data has been suppressed by USDA in an effort to protect confidentiality.

Production Expenses:
- Total farm production expenses shouldered by the region’s farms were $45 million in 2012, an increase of $9 million (26%) over 2007.
- The largest farm production expenses were:
  1. Fertilizers, lime, and soil conditioners ($8.6 million; 19% of the region’s total);
  2. Depreciation ($6.1 million; 14%);
  3. Repairs, supplies, and maintenance costs ($4.2 million; 9%);
  4. Chemicals ($4 million; 9%)
  5. Gasoline, fuels, and oils ($3.7 million; 8%).

Grains, Dry Edible Beans, Oil Crops, & others:
- 57 farms (5%) sold $23 million of wheat in 2012, 49% of the region’s total farm product sales. This was a 35% increase ($6 million) over the $17 million sold in 2007.
- 3 million bushels of wheat were harvested from 47,946 acres.
- This is an average sale of $7.38 per bushel.
- 265 farms raised 1 million bushels of oats on 14,899 acres.

Cattle & Dairy, and Other livestock & animal products:
- 405 farms (37%) in the region held an inventory of 6,925 cattle and calves in 2012.
- 323 farms (29%) held an inventory of 3,049 beef cows.
- 200 farms (18%) held an inventory of 3,477 laying hens.
- 407 farms (37%) produced 70,393 dry tons of forage crops (hay, etc.) on 32,634 acres.
- The region saw a significant decrease in the value of horses, ponies, mules, burros, and donkeys between 2007 and 2012, from $1.2 million to $230,000, an 81% decrease.

Nursery, Landscape and Ornamental Crops:
- 38 farms sold $1.4 million of nursery, landscape, and ornamental crops.

Vegetables & Melons (some farmers state that Ag Census data do not fully represent vegetable production):
- 49 farms sold $809,000 of vegetables, melons, potatoes, and sweet potatoes from 163 acres.
- This was a 158% increase in the number of farms raising vegetables (19 in 2007).
- Sales increased 83% from $441,000 during the same five years.
Fruits (some farmers state that Ag Census data do not fully represent fruit production):

- 31 farms hold 39 acres of orchard.
- $113,000 of fruits and berries were sold by 46 farms.

Direct & organic sales:

- 16 farms (1.5%) participate in the USDA National Organic Program (NOP). Five farms are certified organic, while 9 others are transitioning to organic. Sales figures for these farms was suppressed by USDA in an effort to protect confidentiality.
- 14% (151) of the region’s farms sold $494,000 worth of agricultural products directly to individuals for human consumption.
- This was a decline of 8 farms (5%) from 2007, and a decline of 3% from 2007 sales of $510,000.
- Direct sales accounted for 1% of the region’s farm product sales, compared with 0.1% for Idaho and 0.3% for the U.S.
- These 151 farms in the region represented 6% of Idaho’s farms engaged in direct sales, and made 6% of Idaho’s total direct sales in 2012.
- 27 of the region’s farms sold direct to retail stores.
- 86 farms produced value-added products.

Conservation practices:

- In 2012, 177 (16%) Benewah and Kootenai County farmers used rotational management or intensive grazing methods, equal to the statewide usage rate.
- 39 farms (4%) in the region received irrigation water from the U.S. Bureau of Reclamation, compared with 26% of Idaho’s farms.

Operation and operator characteristics:

<table>
<thead>
<tr>
<th></th>
<th>farms</th>
<th>acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family or individual ownership</td>
<td>941</td>
<td>133,930</td>
</tr>
<tr>
<td>Partnership</td>
<td>57</td>
<td>28,753</td>
</tr>
<tr>
<td>Family-held corporation</td>
<td>48</td>
<td>47,530</td>
</tr>
<tr>
<td>Other corporation</td>
<td>10</td>
<td>7,462</td>
</tr>
<tr>
<td>Other - cooperative, estate or trust, institutional, etc.</td>
<td>42</td>
<td>53,180</td>
</tr>
</tbody>
</table>
County Highlights

Benewah County highlights (Census of Agriculture, 2012):

- Benewah County had 274 farms with 146,615 acres of land.
- This represents a 6% decrease in the number of farms, and a 5% decrease in acreage, since 2007.
- Average farm size was 535 acres.
- Average market value of land and buildings for these farms was $848,998.
- Benewah County farms sold $23.9 million of agricultural products in 2012.
- This was an increase of 17% over 2007 sales, primarily due to increased wheat sales.
- Of that, $23.1 (97%) million were crop sales.
- County farmers sold $740,000 of livestock and products (3% of sales).
- Wheat sales totaled $15 million, 63% of total product sales.
- Sales of lentils appear to total about $3 million.
- Sales figures for forage crops and hay in 2012 were withheld by USDA in an effort to protect confidentiality. Sales in 2007 totaled $3 million. The number of farms selling forage crops rose 31% (81 to 106 farms) from 2007 to 2012.
- The most prevalent farm size was 50 to 179 acres, with 91 farms (33% of the total).
- 96 farms (35%) were less than 50 acres.
- 25 farms (9%) were 1,000 acres or more.
- 193 Benewah County farms (70%) sold less than $10,000 in farm products.
- 30 county farms (11%) sold more than $100,000 in farm products.
- 26 Benewah County farms (9% of farms) sold $63,000 (0.3% of sales) of products directly to household consumers. This was the same as the national average of 0.3%.
- Ten percent fewer farms sold direct in 2012 than in 2007, and direct sales fell 3%.
- Benewah County rankings among Idaho counties in 2012:
  - 2nd in Idaho (and 12th in the U.S.) for lentil acreage, with 8,684. These lentils appear to be raised by one single farm.
  - 9th in Idaho for acreage planted to winter wheat for grain.

Kootenai County highlights (Census of Agriculture, 2012):

- Kootenai County had 824 farms in 2012.
- This was just two fewer farms than in 2007.
- County farms have 124,240 acres of land, 5% fewer than 2007.
- Average farm size was 151 acres; median size was 36 acres).
- Average market value of land and buildings was $624,139.
- County farmers sold $24 million of agricultural products in 2012.
• This was an increase of 45% in crop and livestock sales, primarily due to increased wheat and lentil sales.
• Of these sales, $20 million (84%) were crop sales.
• $4 million (16%) of these sales were livestock and related products.
• 24 county farms raised 1.1 million bushels of wheat on 16,144 acres, selling them for $8 million (34% of total sales).
• Sales of forage crops totaled $6.7 million (28% of total sales) from 226 farms.
• Nursery and ornamental crops sales totaled $1.1 million.
• Cattle and calf sales totaled $3 million (12% of total sales).
• The most prevalent farm size in Kootenai County was 10 to 49 acres, with 312 farms (38% of the total).
• 481 farms (58%) were less than 50 acres.
• 26 farms (3%) were 1,000 acres or more.
• 663 Kootenai County farms (80%) sold less than $10,000 in farm products.
• 34 farms (4%) sold more than $100,000 in farm products.
• 125 farms (4%) sold $431,000 (1.8% of total farm product sales) of products directly to household consumers. This was a 4% decrease in the number of farms and a 3% decline in sales since 2007. Direct sales accounted for 0.3% of U.S. farm product sales in 2012.
• Kootenai County rankings among Idaho counties in 2012:
  o 2nd in Idaho (and 25th in the U.S.) for value of sales of cut Christmas trees and short rotation woody crops ($121,000 in sales among 12 farms).
  o 3rd in Idaho (and 21st in the U.S.) for field and grass seed crop acreage with 3,830 acres.
  o 5th in Idaho for hogs and pigs inventory with 1,858 (sales of hogs and pigs accounted for $252,000 in sales, or roughly 1% of total sales); sales ranked seventh in the state.
  o 9th in Idaho for layer inventory (2,923 hens held among 157 producers, representing slightly less than one-half of one percent of Idaho’s total layer inventory).

Source: Bureau of Economic Analysis
Crop and livestock sales (adjusted) in Benewah & Kootenai Counties, Idaho, 1969-2014

Source: Bureau of Economic Analysis

Farm production expenses (adjusted) in Benewah & Kootenai Counties, Idaho, 1969-2014

Source: Bureau of Economic Analysis
Coeur d'Alene Farm & Food Economy — Ken Meter, Crossroads Resource Center — 2016

Benewah & Kootenai Counties, Idaho -- adjusted net farm income by type, 1969-2014

Source: Bureau of Economic Analysis
Idaho Highlights

State of Idaho Highlights  (Census of Agriculture, 2012):

- 24,816 farms, 2% fewer than in 2007.
- 11,760,109 acres of land in farms, 2% more than in 2007.
- $26 billion estimated market value of land and buildings ($1.05 million average per farm).
- Idaho farmers sold $7.8 billion of agricultural products in 2012.
- Of this, $3.4 billion (44%) were crop sales and $4.4 billion (56%) were livestock sales.
- 54% of Idaho farms reported net losses in 2012.
- The most prevalent farm size was 10 to 49 acres, with 7,031 farms (28%).
- 11,892 farms (48%) held less than 50 acres, and 2,518 farms (10%) held more than 1,000 acres.
- 13,823 farms (56%) had less than $10,000 in sales.
- 5,096 farms (21%) had $100,000 or more in sales.
- The ranking of Idaho among U.S. States in the following categories is as follows:
  - 3rd for acres of barley;
  - 4th for value of sales of vegetables, melons, potatoes, and sweet potatoes;
  - 4th for value of sales of other crops and hay;
  - 4th for value of sales of milk from cows;
  - 6th for acres of spring wheat;
  - 6th for inventory of pheasants;
  - 7th for value of sales of sheep, goats, wool, mohair, and milk;
  - 8th for inventory of sheep and lambs;
  - 10th for value of sales of cattle and calves.
- 2,420 Idaho farmers (10%) sold $8.5 million worth of agricultural products directly to consumers.
- This was a 17% increase in the number of farmers and a 9% increase in the value of sales compared with 2007.
- Direct sales accounted for 0.1% of total farm product sales in the State, less than the national rate of 0.3%.
- 269 Idaho farms (1%) participate in the USDA NOP, of which 211 sold $56 million of certified or exempt organically produced commodities.
- 6,491 farms (26%) received irrigation water from the Bureau of Reclamation.
- 4,087 farms (16%) practice rotational or management intensive grazing.
- 152 farms (7%) market through community supported agriculture (CSA).
- 144 farms (1%) harvested biomass for renewable energy.
Idaho’s top farm products in 2014 (Economic Research Service)
The data in the table and pie chart below are for the state of Idaho. See chart on next page.

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy products &amp; milk</td>
<td>3,198</td>
</tr>
<tr>
<td>Cattle &amp; calves</td>
<td>2,041</td>
</tr>
<tr>
<td>Vegetables &amp; melons</td>
<td>1,094</td>
</tr>
<tr>
<td>Feed crops</td>
<td>849</td>
</tr>
<tr>
<td>Wheat</td>
<td>647</td>
</tr>
<tr>
<td>Other crops</td>
<td>581</td>
</tr>
<tr>
<td>Other animals &amp; products</td>
<td>151</td>
</tr>
<tr>
<td>Corn</td>
<td>85</td>
</tr>
<tr>
<td>Poultry &amp; eggs</td>
<td>52</td>
</tr>
<tr>
<td>Hogs</td>
<td>29</td>
</tr>
<tr>
<td>Fruits &amp; nuts</td>
<td>23</td>
</tr>
<tr>
<td>Oil crops</td>
<td>17</td>
</tr>
</tbody>
</table>

Note also that at $8.5 million, direct sales from farmers to consumers would show up on state rankings if they constituted a single product.
Idaho’s top farm products in 2014 (Economic Research Service)
See table on previous page

Key Findings

Balance of Cash Receipts and Production Costs (BEA):  
1,098 Benewah and Kootenai County farmers sell $43 million of food commodities per year (1989-2014 average), spending $53 million to raise them, for an average loss of $10 million each year. This is an average net loss of $9,100 per farm. *Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Census of Agriculture (above).*

Overall, farm producers spent $260 million more in raising crops and livestock over the years 1989 to 2014 than they earned by selling them. Farm production costs exceeded cash receipts for 23 years of that 26-year period, including each year since 1993. Moreover, 67% of the region's farms reported that they lost money in 2012 (Ag Census), and farmers in the two counties earned $26 million less by selling commodities in 2014 than they earned in 1969 (in 2014 dollars).

Farmers earn another $8 million per year of farm-related income — primarily custom work, and rental income (25-year average for 1989-2014). Federal farm support payments are a more important source of net income than commodity production, averaging $5 million per year for the two-county region over the same years.

Benewah and Kootenai County consumers:  
*See also information covering low-income food consumption and food-related health conditions, page 1-2 above.*

Benewah and Kootenai County consumers spend $432 million buying food each year, including $251 million for home use. Most of this food is produced outside the region, so Benewah and Kootenai County consumers spend about $400 million per year buying food sourced far away. Only $494,000 of food products (0.01% of farm cash receipts and 0.1% of the region’s consumer market) are sold by farmers directly to consumers.

Farm and food economy summary: 
Farmers lose $10 million each year producing food commodities. Those farmers that raise subsidized crops receive $5 million each year from government programs. Meanwhile, farmers in the two counties spend $30 million buying inputs sourced outside of the region. Even when farmers make money, these input purchases result in substantial losses to the region as a whole. Overall, farm production creates a loss of $35 million to the region.

Meanwhile, consumers spend $400 million buying food from outside. Thus, total loss to the region is $435 million of potential wealth *each year.* This loss amounts to ten times the value of all food products raised by the region’s farmers.
Consumer Markets

Benewah and Kootenai Counties: markets for food eaten at home (2014):
Benewah and Kootenai Counties (combined) residents purchase $432 million of food each year, including $251 million to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$54</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>51</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>30</td>
</tr>
<tr>
<td>Dairy products</td>
<td>26</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>89</td>
</tr>
</tbody>
</table>

If Benewah and Kootenai County residents purchased $5 of food each week directly from farms in the region, this would generate $41 million of new farm income in the two counties.
Benewah County: markets for food eaten at home (2014):
Benewah County residents purchase $25 million of food each year, including $15 million to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th></th>
<th>millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 3</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>3</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>2</td>
</tr>
<tr>
<td>Dairy products</td>
<td>2</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>5</td>
</tr>
</tbody>
</table>

Kootenai County: markets for food eaten at home (2014):
Kootenai County residents purchase $407 million of food each year, including $236 million to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th></th>
<th>millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 51</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>48</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>29</td>
</tr>
<tr>
<td>Dairy products</td>
<td>25</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>84</td>
</tr>
</tbody>
</table>

De Smet: markets for food eaten at home (2014):
De Smet residents purchase $508,000 of food each year, including $295,000 to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th></th>
<th>Data in dollars, unlike other tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 63,000</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>60,000</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>36,000</td>
</tr>
<tr>
<td>Dairy products</td>
<td>31,000</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>105,000</td>
</tr>
</tbody>
</table>

Plummer: markets for food eaten at home (2014):
Plummer residents purchase $2.9 million of food each year, including $1.7 million to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th></th>
<th>Data in dollars, unlike other tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 358,000</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>339,000</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>203,000</td>
</tr>
<tr>
<td>Dairy products</td>
<td>174,000</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>593,000</td>
</tr>
</tbody>
</table>
Worley: markets for food eaten at home (2014):
Worley residents purchase $588,000 of food each year, including $341,000 to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th>Data in dollars, unlike other tables</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$ 73,000</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>69,000</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>41,000</td>
</tr>
<tr>
<td>Dairy products</td>
<td>36,000</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>121,000</td>
</tr>
</tbody>
</table>

Census Tracts Benewah 94 and Kootenai 94: markets for food eaten at home (2014):
Residents of Census Tracts Benewah 94 and Kootenai 94 purchase $19 million of food each year, including $11 million to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th>millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
</tr>
<tr>
<td>Dairy products</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
</tr>
</tbody>
</table>

An estimated $18 million of food purchased by residents in the two Census Tracts is sourced outside of this geographic area.

If each resident of the two Census Tracts purchased $5 of food each week from farms located within the Census Tracts, these farms would earn $1.8 million in sales. Currently there are not enough farms in this region to support such sales.

Low-income residents of the two census tracts spend an estimated $7 million each year purchasing food, a portion of which is subsidized through programs such as SNAP and WIC.
Spokane Metro region: markets for food eaten at home (2014):
Spokane metro residents purchase $1.5 billion of food each year, including $866 million to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$186</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>176</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>105</td>
</tr>
<tr>
<td>Dairy products</td>
<td>91</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>308</td>
</tr>
</tbody>
</table>

State of Idaho: markets for food eaten at home (2014):
Idaho residents purchase $4.5 billion of food each year, including $2.6 billion to eat at home. Home purchases break down in the following way:

<table>
<thead>
<tr>
<th>Item</th>
<th>Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meats, poultry, fish, and eggs</td>
<td>$562</td>
</tr>
<tr>
<td>Fruits &amp; vegetables</td>
<td>532</td>
</tr>
<tr>
<td>Cereals and bakery products</td>
<td>318</td>
</tr>
<tr>
<td>Dairy products</td>
<td>273</td>
</tr>
<tr>
<td>“Other,” incl. sweets, fats, &amp; oils</td>
<td>931</td>
</tr>
</tbody>
</table>
Key data sources:

Bureau of Economic Analysis data on farm production balance
http://www.bea.doc.gov/bea/regional/reis/

Food consumption estimates from Bureau of Labor Statistics Consumer Expenditure Survey
http://www.bls.gov/cex/home.htm

U.S. Census of Agriculture
http://www.nass.usda.gov/census/

USDA/Economic Research Service food consumption data:
http://www.ers.usda.gov/data/foodconsumption/

USDA/ Economic Research Service farm income data:
http://ers.usda.gov/Data/FarmIncome/finfidmu.htm

For more information:

To see results from Finding Food in Farm Country studies in other regions of the U.S.:
http://www.crcworks.org/?submit=fffc

To read the original Finding Food in Farm Country study from Southeast Minnesota (written for the Experiment in Rural Cooperation): http://www.crcworks.org/ff.pdf

To view a PowerPoint presented in March, 2008, by Ken Meter at Rep. Collin Peterson’s (D-MN) Minnesota agricultural forum, called the “Home Grown Economy”:
http://www.crcworks.org/crcppts/petersonkm08.pdf

For further information: http://www.crcworks.org/

Contact Ken Meter at Crossroads Resource Center
<kmeter@crcworks.org>
(612) 869-8664