# ECONOMIC IMPACT OF AGRICULTURE

EXTENSION

MONTANA STATE UNIVERSITY

### **Granite County**



January 2021

Granite County is a rural sparsely populated county located in the western part of the state. Over 25% of land in Granite County is classified as farm land.

<b>Overview</b> (2017 Data)	/
Population	3,378
County Size (acres)	1,105,384
Land in Farms (%)	25.8
Number of Farms	151
Median Farm Size (acres)	540
Average Farm Size (acres)	1,892
Source: <u>Census of Agriculture</u> : Table 1: Highlights: 2017	County Summary

### **Farm Revenue**

Farm revenues (which includes the market value of products sold, government payments, and farmrelated income) were over \$19 million while production expenses were nearly \$16 million. Government payments were 1.4% of farm revenues.

Market Value of Products Sold	\$17,898,000
Government Payments	\$268,000
Farm-Related Income	\$1,233,000
Total Farm Production Expenses	\$15,792,000
Net Cash Farm Income	\$3,606,000

Source: Census of Agriculture: Tables 2, 3, 4, 5 and 6: 2017

# Taxation

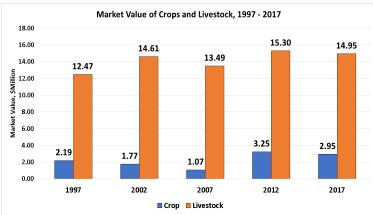
The market value of all property in Granite County was approximately \$698 million in 2019. The taxable value assigned by the Montana Department of Revenue was \$14 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 property) comprised 5.10% of the county's taxable value.

Property Tax	2019	2014
Summary		
Market Value of All	\$698,875,695	\$671,458,216
Property		
Taxable Value of All	\$14,190,036	\$10,750,945
Property		
Taxable Value of	\$723,062	\$680,451
Agricultural Property		
Ag Taxable Value	5.10%	6.33%
as % of All Property		

Source: Montana Dept. of Rev. Montana Taxes by County in  $\underline{2018}$  and Montana Taxes by County in  $\underline{2014}$ 

# Market Value of Crops and Livestock

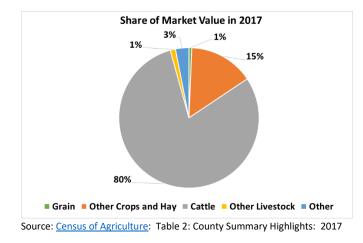
After adjusting for inflation, the market value of crops increased by 34%, while the market value of livestock increased by 20%, from 1997 to 2017.



Sources: <u>Census of Agriculture</u>: Table 1: County Summary Highlights: 2017 and <u>St. Louis Fed Producer Price Index</u>

### **Crops and Livestock**

Cattle (80%) and hay (15%) comprised 95% of total crop and livestock sales in 2017.



# Farm Size by Acres

The percentage of smaller farms, less than 500 acres, increased slightly from 47% to 48%, while the percentage of larger farms, 500 acres or more, decreased slightly from 53% to 52% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	11	7	11	7
10 to 49	15	10	14	9
50 to 179	16	11	28	17
180 to 499	31	21	24	15
500 to 999	15	10	18	11
1,000 or more	63	42	68	42
TOTAL	151	100	163	100

Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

# Farm Size by Sales

The proportion of total sales from smallest farms with less than \$100,000 in sales decreased from 67% to 64%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 33% to 36% from 2012 to 2017.

	2017		2012	
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	50	33	56	34
2,500 to 4,999	5	3	4	2
5,000 to 9,999	6	4	8	5
10,000 to 24,999	9	6	17	10
25,000 to 49,999	4	3	12	7
50,000 to 99,999	22	15	13	8
100,000 or more	55	36	53	33
TOTAL	151	100	163	100

Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

# Tillage and Land Use

The percentage of farms using no till or reduced tillage increased, while the percentage of farms using intensive tillage or cover crops decreased from 2012 to 2017.

	2017		2012	
	Number		Number	
Tillage	of Farms	%	of Farms	%
No tillage	6	4	1	1
Reduced tillage	5	3	3	2
Intensive tillage	11	7	17	10
Cover crops	2	1	10	6
TOTAL FARMS	151		163	

Source: Census of Agriculture: Table 41 Land Use Practices

# **Producer Profile**

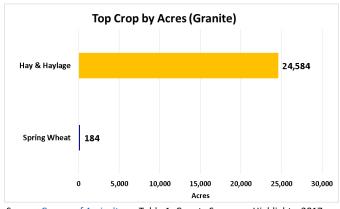
The county producer population was about the same age as the Montana producer population. Thirty-six percent of county producers were under 55 years of age, while 40% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Fiftyeight percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 51% of county producers, while farming was the primary occupation for 50% of Montana producers.

	County		State	
	Number of		Number of	
Characteristics	Producers	%	Producers	%
Age				
18 – 25	10	3	570	1
25 to 34	2	1	3,285	7
35 to 44	31	10	5,179	11
45 to 54	65	22	7,309	15
55 to 64	69	23	13,838	29
65 to 74	81	27	11,469	24
75 and older	38	13	5,587	12
Sex	Sex			
Male	173	58	28,563	60
Female	124	42	18,673	40
Primary Occupation				
Yes	151	51	23,847	50
No	146	49	24,314	50
TOTAL PRODUCERS	297	100	48,161	100

Source: <u>Census of Agriculture</u>: Table 45 Selected Operation and Producer Characteristics

### **Top Crops by Acres**

The top crops were hay and haylage and spring wheat.



Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

# **Top Livestock**

The top livestock were cattle, sheep, and poultry (chickens-layers).

Livestock	Number of Head	
Cattle	19,392	
Sheep	1,078	
Chickens-Layers	174	
Source: Consus of Agriculture: Tables 11 (Cattle) 12 (Sheen)		

Source: <u>Census of Agriculture</u>: Tables 11 (Cattle), 13 (Sheep) and 19 (Poultry)

### **Employment Impact**

Agricultural production employed 366 workers, or 23% of the county's labor force. According to IMPLAN, economic impact model, 240 of the workers were directly employed in production agriculture. An additional 112 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 14 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 5 additional jobs are generated in the county.

Labor Force	Impact Multipliers
1,617	
240	
112	0.47
14	0.06
366	0.53
23	
	Force 1,617 240 112 14 366

#### Source: <u>Bureau of Labor Statistics</u>, <u>www.bls.gov/#cntyaa</u> and IMPLAN Estimates

# Value Added Impacts

Farms and ranches generated \$11.6 million of valueadded, or 13% of the county's total gross domestic product of \$90 million in 2017. According to IMPLAN, \$7.6 million was directly contributed by farmers and ranchers. An additional \$3.2 million was generated by businesses supporting agricultural production and \$0.8 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.52 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	90.0	
Direct Impact**	7.6	
Indirect Impact**	3.2	0.42
Induced Impact**	0.8	0.10
Total Impact**	11.6	0.52
Agriculture's Share (%)	13	

Sources: \* St. Louis Federal Reserve Bank, \*\* IMPLAN Estimates

#### References

- 2017 Census of Agriculture, National Agricultural Statistics Service, Montana, State and County Data, Volume 1, Geographic Area Series, part 26 <u>https://www.nass.usda.gov/Publications/AgCensus/2017/Full</u> <u>Report/Volume 1, Chapter 1 State Level/Montana/mtv1.p</u> <u>df</u>
- Dept. of Revenue "Montana Taxes by County in 2014" <u>https://mtrevenue.gov/wp-</u> content/uploads/2018/01/2014-Taxes-by-County.pdf

- Dept. of Revenue "Montana Taxes by County in 2018" <u>https://mtrevenue.gov/wp-</u> content/uploads/2020/02/2018-Taxes-by-County.pdf
- St. Louis Federal Reserve Bank (2017). Current dollar gross domestic product by county for Montana, retrieved from <u>https://fred.stlouisfed.org/release/tables?rid=397&</u> <u>eid=1062609&od=2017-01-01#</u>
- St. Louis Federal Reserve Bank (2020). Producer price index for all commodities, St. Louis Federal Reserve Bank, retrieved from <u>https://fred.stlouisfed.org/series/PPIACO</u>
- Bureau of Labor Statistics (2017), Montana labor force, retrieved from <a href="https://bls.gov/lau/#cntyaa">https://bls.gov/lau/#cntyaa</a>

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