



Are Montana's Farms and Ranches Getting Bigger?

By Joel Schumacher

PHOTO CREDIT: MARKO MANOUKIAN

Montana's agricultural operations have been changing in size since the first homesteaders arrived more than a century ago. Advances in technology that improve efficiency are probably the most significant contributor to changes in operation size.

These advances have come in the form of tractor and equipment capabilities, improved genetics for livestock, seed production and variety improvements, better fertilizers and pesticides, and the introduction of Global Positioning Systems (GPS), among others. Every few months, someone mentions that changing technology has enabled big operations to get bigger, while smaller operations, unable to adopt the technology changes, are having a hard time making it. Is this true?

Land in farms

Every five years, USDA National Agricultural Statistics Service (NASS) conducts the Census of Agriculture. The 2017 Census is a treasure trove of information about agriculture and provides the opportunity to look at this issue from a few different angles. "Land in Farms" data is useful for exploring this farm size issue. Land in Farms includes pasture, fallow, and crop land for all agricultural operations, whether the land is owned or rented. Total land in farms in Montana was 58.1 million acres in 2017, which was a decline of 2.7% from 2012 (**Figure 1**).

Farms with less than 180 acres accounted for 1.1% of all land in farms, which is the same as in 2012. Land in farms between 180 and 1,000 acres

declined from 5.1% in 2012 to 4.6% in 2017. Land in farms between 1,000 and 4,999 acres also declined, from 25.1% to 23.5%. The largest farms (over 5,000 acres) increased slightly in total acres and from 68.8% to 70.8% of all acres. This indicates that the very smallest farms are stable in terms of total acres but are a very small portion all land in farms. The largest farms are gaining slightly in total acres and share of all acres. Both categories of mid-sized farms saw declines in total acreage, although the number of mid-sized farms increased slightly (**Figure 2**).

Cattle operations

Evaluating the size of cattle operations in Montana is another way to examine the changing size of Montana agricultural operations. A total of 11,400 Montana ranches reported owning 2,518,571 beef cattle in 2017. The number of ranches declined by 445 (3.8%) and the number of cattle declined by 115,160 (4.4%) since 2012. The only increase in number of ranches was for those with herd sizes between 200 to 500 head (**Figure 3**).

Another way to look at cattle operations is in terms of the percentage of the state's cattle raised on different sized operations (**Figure 4**). These data tell a similar story that the only growth appeared in the

mid-sized operations. The data also point out that the largest operations (over 1,000 cattle) control the largest portion of Montana's cattle inventory.

In 2017, 8,013 ranches reported having an inventory of less than 200 head. Collectively, these operations own 16% of Montana's cattle. About 2,160 ranches reported cattle inventory between 100 and 499. These operations own 27% of Montana's cattle, up from 23% in 2012. Over 1,225 ranches reported owning more than 500 animals. These large operations own 57% of Montana's cattle.

Trends over time

Are Montana agricultural operations increasing in size? When examining total land controlled by Montana agricultural operations over the past

five years, the answer is yes. Although total land in farms declined by over 2%, the largest operations (over 5,000 acres) increased their collective holdings by about 0.1%. The very smallest farms (under 180 acres) held steady while the farms in the middle declined in total acreage by over 9%. For cattle producers the trend is different. The sweet spot appears to be in the middle. Those operations with herds of 200 to 500 head are becoming more common and represent a larger share of all cattle production in Montana. The share of cattle in smaller and larger operations both declined slightly in recent years. ■

Joel Schumacher is an MSU Extension Associate Specialist in the Department of Agricultural Economics and Economics.

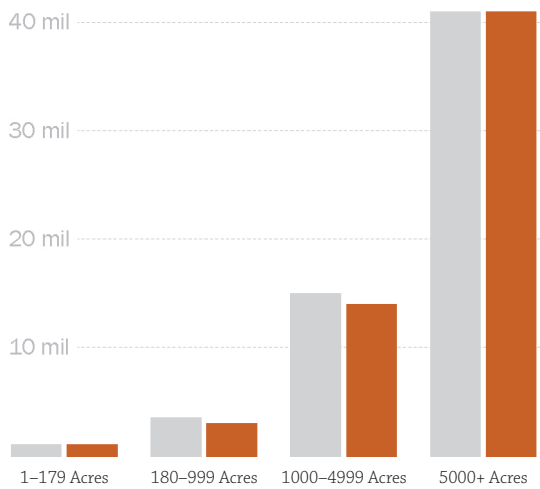


Figure 1: Total Acreage in Farms by Farm Size

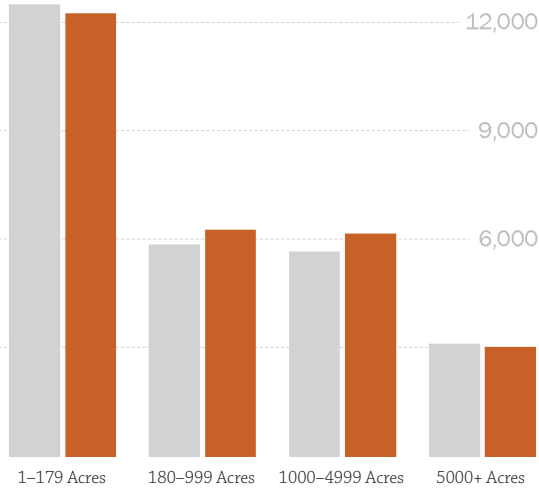


Figure 2: Number of Farms by Farm Size

2012
2017

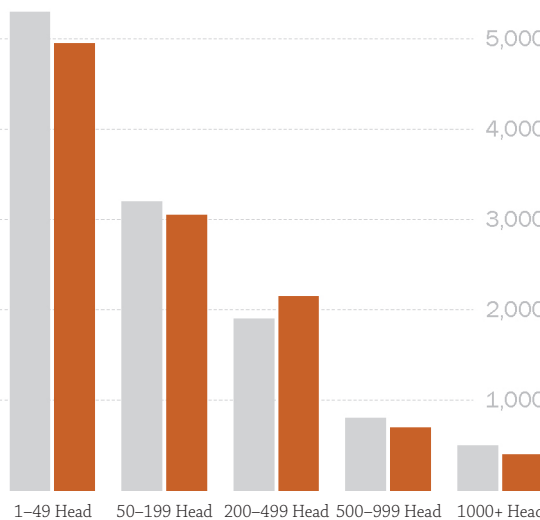


Figure 3: Number of Cattle Ranches by Herd Size

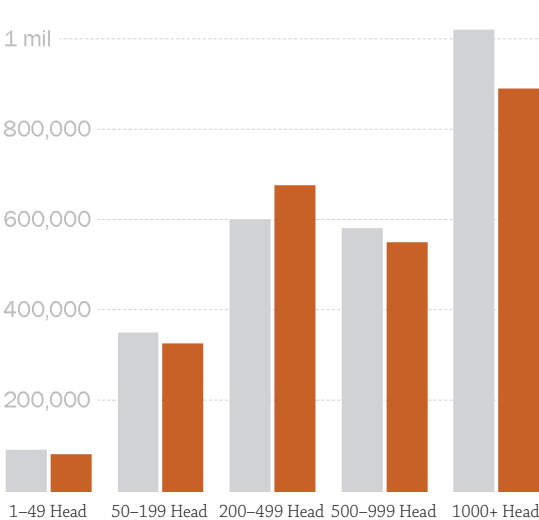


Figure 4: Cattle Inventory by Herd Size