

Garfield County



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Spring, the start of a new production cycle by Anne Miller.

Garfield County has been called the furthest place from anywhere in the Continental United States. The county seat of Jordan sits in the middle of the 3.1 million acre region. Sand Springs greets traveler on the western half of the county on Highway 200, while Cohagen marks the midpoint of the southern half of the landscape on Highway 59. Brusett is a well-recognized region in the northwest that is only accessible on dirt roads. The Missouri River Breaks and Fort Peck Lake create the northern boundary, offering recreationalists a very diverse destination when visiting the county.

There are approximately 1,250 people in Garfield County, with 600 in the incorporated town of Jordan. Agriculture is the primary industry and the collective culture of the population. Dryland wheat and barley are the predominate crops, followed by annual forages and a scattering of pulse crops. Cattle, both purebred operations and commercial herds dominate the landscape. While a historical sheep producing community, the sheep numbers have dwindled the past 20 years to only a few thousand head.

Tourism in the forms of fishing, hunting, boating, and dinosaur digging are available throughout the year. The Hell Creek Formation and the Hell Creek State Park recreational area on Fort Peck Lake draw people from all over the world.

Grass Hoppers Abound

Grasshoppers were the key word in 2021. Eastern Montana Agents and their constituents began planning for a potential major impact beginning in the fall of 2020.

Based the numbers of hoppers reported in the fall of 2020, discussions were started to increase awareness of the potential problems and to work on planning for regional agricultural producers.

In January of 2021, south-eastern agents first addressed the potential hopper issues by presenting several workshops during the Winter-Series programs. The program addressed current USDA hopper estimates for the 2021 growing season. Management topics were covered ranging from IPM, scouting, instars, density thresholds, alternate crops and grazing methods and finally herbicide control measures.

The grasshopper hatch started in late May of 2021 in Garfield County. The initial impacts were minor, but as the heat increased and the rainfall stopped, the negative effects of the grasshoppers were intensified. The hoppers were destroying livestock grazing and crop production. The Extension service worked with local producers on direct and in-direct management options. Priorities were evaluated for direct herbicide control measures, effectiveness, longevity and cost effectiveness.

There was not a single management option that worked for all producers. Each operation had to address the hopper issues based on their own set of circumstances and financial evaluations. Many different management strategies were implemented with varying degrees of success.

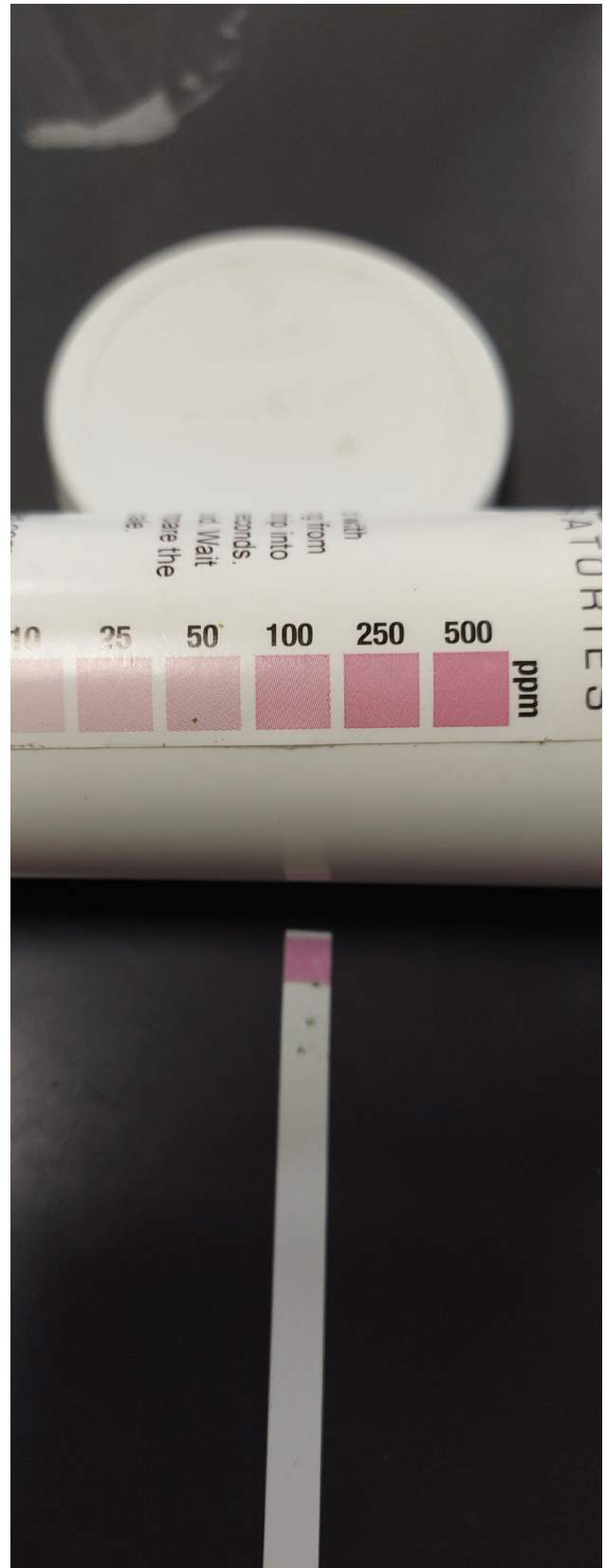
Following the grasshoppers in the fall of 2021, the Extension Service discussed outcomes and evaluations with several local producers. There was not a clear-cut opinion on management techniques of timing. Everyone said they learned something from the year and many said they had tried different strategies as compared to previous outbreaks. Most of the producers indicated they have a better idea of what they will do in the event of grasshoppers in 2022.

Drought Impacts: Hay and Nitrates

A year in review of 2021 would not list many benefits to agriculture operations in eastern Montana. Grasshoppers followed poor moisture in the spring and the continued lack of rain through the growing season created a very poor hay production year. Garfield County hay growers generally put up a tremendous amount of small grain hay used to feed local cattle throughout the winter months. Unfortunately, this was not the case in 2021. Hay production was negatively impacted by environmental conditions and the Garfield County Extension service worked closely with area producers to manage the hay that was put up and to develop rations for the fall and winter with forage commodities as they could be found and purchased.

Small grain hay is a staple for livestock feeding in Montana. The growing conditions of 2021 in the east made nitrates a very real concern. Hay barley, winter wheat, triticale and oats were all subject to very stressful growing conditions and all forage varieties exhibited some level of nitrate accumulation. The Garfield County Extension Office evaluated over 175 individual samples during the growing season for nitrates. Most of the samplings were tested prior to harvest to assist growers in making decision of when to harvest. While a delay in swathing was not always possible due to the impact of grasshoppers, it was still a tool to reduce nitrates and potential feeding issues.

Samples were all testing using a nitrate test strip technique. Samples were evaluated and results were discussed with the grower. Samples that tested positive for elevated nitrates were later retested prior to cutting, or where retested when the hay was in the bale. Retesting with a lab test to verify nitrate concentrations is important for feeding decisions. While elevated nitrates are a concern when feeding, most of the forage is still usable when properly blending in a complete ration. Due to the limited resources available to livestock producers this year, many forages have been blending to meet livestock requirements.





Previous Page: Elevated nitrate levels in grain hay, by Eric Miller; **This Page:** Hopper Damage in Spring Wheat, by Eric Miller;

Grazing became limited in the fall and livestock were being supplemented much earlier than normal. The Extension Service worked with many producers to develop cost effective feed rations that would meet the needs of the livestock. With poor availability of hay, a diverse collection of feeds have been used in rations this year. As new feeds are located and brought to the region, the Extension Office continues to work with producers to test the feeds and create viable feeding options

Garfield County Staff



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