Phillips County is in North Central Montana along the Hi-Line. It encompasses 3.2 million acres with 33% being managed by the Bureau of Land Management and 48.5% as private lands. Other land managers in the area are Montana State Lands, U.S. Fish and Wildlife Service and the Fort Belknap Indian Reservation. Agriculture is the main industry in Phillips County consisting of 53,000 mother cows (ranking third most in the state); 5,900 sheep; 363,200 crop acres; and 40,000 acres of irrigated land. The gross value of all agricultural commodities in 2017 was about $77.9 million dollars excluding any government program. Recreation is also an industry in the county with big game and upland bird hunting, and warm water fish species available in the Milk and Missouri River, which make up the southern border of the county. There is one large irrigation reservoir, Nelson Reservoir, that also has warm water sport fishing.

Producers hear concerns for future of livestock industry at Jim Schumacher Memorial Livestock Day

Forty producers listened to four presenters at the annual Jim Schumacher Memorial Livestock Day who highlighted industry changes and helpful tools.

Corbitt Wall discussed how the cattle market has evolved from driving herd to market and selling them as only finished cattle pen-side in the stockyards in the 1930s. Currently, we have a beef feedlot industry in warmer parts of the country, and he highlighted that 80% of the cattle are controlled by four major packers who have control over pricing from feedlot to packing plant. This leaves very few finished cattle sold under negotiated sales and negatively impacts price discovery for yearling and feeder calves as well.

Brett Crosby discussed beef basis, or the process of predicting prices. Crosby outlined how predicting with some accuracy is as important as pregnancy rate or weaning weight. He has developed a tool called beefbasis.com, where a producer can predict the futures price of a calf or yearling with just a few inputs into the free website, which will predict the value by computing the feeder cattle futures and future corn price.

Montana State University Extension Beef Specialist Carla Sanford, PhD, discussed preparation of cows for calving and fetal programming. Fetal programming is the simple recognition that events in utero can alter the offspring. By providing adequate energy and protein and minerals to the developing fetus, the resulting calf will be healthier.

Alison Van Eenennaam, UC Davis Extension Animal Geneticist, PhD, wrote in 2018 why cows may be getting a
bad rap from alternative meat production. Her investigation identified Impossible Burger or Beyond Meat burger as plant-based, made of plant protein extracts which contain fats, binders, and added nutrients to at least meet the amounts of nutrients in meat. Some of these plant-based products have genetically engineered “heme” to make the burger bleed like meat. Plant-based meat production is separate from in-vitro or cultured meat, which is still a somewhat experimental process of cell separation and culturing, in an attempt to mass produce meat. She discussed the boldness and funding of the cultured meat industry. Van Eenennaam describes the process as the definition of “factory farming,” though currently there is not a cultured meat hamburger produced in the world.

Grasshoppers abound

In mid-June of 2020, MSU Extension agent Manoukian received a call from a concerned producer in the southern part of the county. They reported that grasshoppers seemed to be numerous and had started eating the barley hay seeding as well as other grasses.

Manoukian reached out to USDA-APHIS and State Plant Health Director Gary Adams. Adams responded by sending two field technicians to evaluate the situation on July 1. The technicians sampled three ranch locations and performed five counts. If normal economic thresholds are eight grasshoppers per square yard, the technicians inventoried low counts of 30 and high counts of 85 per square yard.

APHIS quickly started the process to create a contract for rangeland insecticide application if a minimum block of 10,000 acres of rangeland could be assembled. To do this with a land ownership checkerboard, involving the Bureau of Land Management (BLM) would be necessary. APHIS had prepared the appropriate Environmental Analysis and had funding for control efforts. The BLM decided to not participate with the APHIS grasshopper control program statewide.

This has resulted in APHIS projecting high grasshopper infestation for the southern part of Phillips County and much of eastern Montana for 2021. Even with a lot of planning and cooperation, if every agency is not participating, important economic impact projects like grasshopper control are difficult to tackle.

Crop tour is a highlight of Summer

The 2020 MSU Extension year has been one of challenges and cancelled meetings replaced with virtual webinars. The annual crop tour in Phillips County was conducted as usual, minus a meal following the tour.

Crop tours were held in north Wagner at the Paul Mortenson farm, east Malta at the Karl Mavencamp farm, and in Saco at the Sunford farm. Thirty producers attended the crop
Tim Seipel, Extension Cropland Weed Specialist, spoke to growers about new herbicide products and weed resistance, by Marko Manoukian
tours. Moisture was more favorable in the Wagner area with 6.5 inches received from planting to July 20. Any crops that were redropped did not fair as well.

July and August were more normally dry. In July, the Malta station reported 0.97 inches of moisture and .47 inches for August. This is 0.67 and 0.87 less than the mean for July and August respectively since 1970. In combination with a dry April (0.07 inches, long-term mean is 1.00 inches) resulted in limited dryland hay production and some small grain crops being short. The dry conditions in the fall did allow for a good harvest.

4-H in Phillips County

2020 was certainly a year for the record books. As COVID-19 began impacting the country in late winter, Phillips County MSU Extension began altering plans for 4-H spring and summer programming. This included switching many regular face-to-face programs such as monthly club meetings, Cloverbuds, Youth Quality Assurance training, and even 4-H Camp, to online platforms. While participation decreased in many elective 4-H activities, it was encouraging to see club leaders and 4-H members get creative while having to social distance.

The greatest alterations to summer programs were to the 4-H Fair and Livestock Sale. While we were thankful for healthy enrollment numbers in the market animal projects, our fairgrounds weren’t large enough for members to distance and hold a fair as usual. An adjusted fair schedule had members exhibit their animals on the day of their show, and most animals did not stay overnight. 4-H shows were not open to the public, so a 4-H and FFA Facebook page was created to live stream the shows, as well as showcase the indoor 4-H exhibits and awards. The Livestock Sale was converted with the help of an online auction company. This increased accessibility for buyers while keeping crowd size to a minimum. While buyers could attend an in-person component of the sale, youth and market animals were not present. Instead youth submitted a pre-recorded sale video of their animal. The sale was a success with 84 animals being sold for $238,087 in total sales, $62,264 of which was sold over the internet.

Even with the alterations to programs and the fair, we received a lot of good feedback about implementing some of the changes, as 4-H families found it was a great way to do some things. In spite of more unknowns in the coming year, we are confident we can continue to deliver a quality 4-H program due to the challenges and growth we all experienced.