Montana State University Extension will host the annual Cropping Seminar series January 8 – 11, 2018, in Fort Benton, Chester, Havre, Shelby, Cut Bank, Choteau, Conrad, Stanford, and Great Falls. Topics will include integrating beef cattle into cover crops, soil fertility, why pesticides may not work as designed, and partial budgeting analysis. The seminars are free, with private and commercial pesticide points available.

Dr. Clain Jones, MSU Extension Soil Fertility specialist, will present on soil fertility and inoculation of pulse crops and nutrient management after both wet and dry years. Dr. Jones will first discuss fertilization and inoculation of pulse crops, a very pertinent topic as an increasing number of acres in the Golden Triangle are transitioned to pulse crops. In 2017, protein levels were not as high as expected for many producers, and Dr. Jones will explain why this may have occurred as it relates to nutrient management during and after dry or wet years. Additionally, Dr. Jones will cover managing nitrate in forages during years with variable precipitation. The presentation will also include data on soil acidification, which has become an increasing issue in Chouteau and Cascade counties.

With numerous reports of producers spraying the same field multiple times, many growers are asking, “Why didn’t my pesticide work?” Dr. Cecil Tharp, MSU Extension pesticide specialist, will address this issue and how producers can most effectively utilize their pesticides. Dr. Tharp will cover common problems when applying pesticides, with particular focus on the importance of calibrating sprayers, understanding active ingredients, understanding the product label and the impacts of environmental conditions on your spray application.

Dr. Kate Fuller, MSU Extension specialist in Agricultural Economics and Economics will share “Partial budget analysis: why and how to estimate cost of production?” Producers will explore enterprise budgeting and partial budget analysis during Fuller’s presentation. Available estimates along with tools to help estimate and benchmark cost of production, for both current and potential enterprises will be shared. There will be time to explore current market conditions and how they will impact producer profitability.

Dr. Darrin Boss, MSU Northern Agricultural Research Center Superintendent, will be sharing his results from four years of cover crop grazing research at Northern Agricultural Research Center near Havre. He will present management recommendations and an economic analysis focused on integrating beef cattle into cover crops, specific to the Golden Triangle area.

No pre-registration is required, and all producers are encouraged to attend. All seminars begin with registration at 8:30 a.m., and the day’s seminar should conclude by 3 p.m. The Havre seminar will begin at 4 p.m. and conclude by 8:30 p.m. Private and commercial pesticide points will be available.

Dates, locations, and contact numbers for each Cropping Seminar are listed below.

- **January 8**: Fort Benton, Ag Center, 1205 20th Street, Tyler Lane, (406) 622-3751
  Stanford City Hall, Katie Hatlelid, (406) 566-2277
  Havre -Northern Ag Research Center, 3710 Assiniboine Road - Shylea Wingard, (406) 265-5481, Ext. 233
- **January 9**: Shelby, Comfort Inn Conference Room, 455 McKinley Ave., Kim Woodring, (406) 424-8350
  Chester, Our Savior’s Lutheran Church Fellowship Hall, located at 10 E. Madison Ave., Jesse Fulbright, (406) 759-5625
- **January 10**: Cut Bank, Cut Bank Voting Center, 913 Railroad St. Kari Lewis, (406) 873-2239
Conrad, Pondera Shooting Sports Complex, 972 Granite Rd., Adriane Good, (406) 271-4053

- **January 11**: Choteau, Stage Stop Inn, 1005 Main Ave N, Brent Roeder, (406) 466-2491
  Great Falls, Montana ExpoPark’s Paddock Club Gold Buckle Room, Rose Malisani, (406) 454-6980 ext. 305

MSU Extension is an ADA/EO/AA/Veteran’s Preference Employer and Provider of Educational Outreach. If you require accommodation for a disability to participate, please notify your local extension office prior to the event.