

CONSERVATION ENHANCEMENT ACTIVITY E595E (WITH MONTANA SUPPLEMENT)



Eliminate the use of chemical

treatments to control pests and to increase the presence of dung beetles

Conservation Practice: Pest Management Conservation System- 595

APPLICABLE LAND USE: Pasture; Range

RESOURCE CONCERN: Animals

ENHANCEMENT LIFE SPAN: 1 Year

Enhancement Description

Pests and parasites can have a significant impact on the economic viability of livestock operations by affecting the performance and health of animals. The use of broad-spectrum insecticides and avermectins have been shown to have a detrimental effect on dung beetle populations. Having a healthy population of dung beetles facilitates the recycling of nutrients and promotes soil and grassland health. By eliminating the application of broad-spectrum insecticides **(including cydectin)** and avermectins, for pest control in and on livestock along with rotational grazing and higher stock densities has shown to increase the dung beetle population. Use of natural or alternative methods of pest control over multiple years is encouraged.

<u>Criteria</u>

- Determine the chemical treatments that are harmful to the dung beetle population and eliminate use. Rotational grazing management and the use of natural treatments for pest control will be implemented. Follow all land grant university recommendations and methods of evaluations.
- A written grazing plan for matching the forage quantity and quality produced with the grazing and/or browsing demand will be followed.
- A written herd management plan to improve herd health and increase herd pest resistance.

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 Maintain diversity of pastureland and rangeland plants to optimize delivery of nutrients to the animals by incorporating the intensity, frequency, timing, and duration of grazing and/or browsing needed as determined by a planning process that includes:



- A resource inventory with ecological site description or reference sheet and structural improvements and existing resource conditions,
- Grazing plan that provides for 45 days or more recovery period between grazing events, and
- All potential contingency plans.
- Supplemental feed and/or minerals will be balanced with the forage consumption to meet the desired nutritional level for the kind and class of grazing and/or browsing livestock.

Documentation Requirements

Participant will:

- Prior to implementation, provide documentation for review showing producer's record of integrated pest management meeting Conservation Practice Standard Pest Management Conservation System (CPS 595) general criteria.
- During implementation, keep documentation, such as records, plans, receipts, showing the implementation of the activities selected including:
 - Written documentation of what chemical treatment(s) that were replaced by non-harmful alternative method(s). The Pest Management Conservation System Plan with PAMS strategies is available for documentation and located in Montana NRCS FOTG, Section 4, CPS 595. The PMCS Plan should address all four PAMS components (prevention, avoidance, monitoring, and suppression).
 - Resources to assist in PMCS Plan development may include: <u>Control of Lice in Cattle</u> by UV Extension, <u>Control of Lice and Mites in Cattle</u> by Organic Agriculture Center of Canada, <u>Dung</u> <u>Beetle Count</u> by Vidacycle, and <u>Dung Beetles</u> by Cornell University. Additional resources can be found by searching university IPM programs.
 - A written plan for matching the forage quantity and quality produced with the grazing and/or browsing demand will be followed.
 - Record of rotational grazing.
- After implementation, make documentation available for review by NRCS to verify implementation of the enhancement.

E595E – Eliminate the use of chemical treatments	August 2019	
to control pests and to increase the presence of	MT Supplement November 2024	Page 2
dung beetles with Montana Supplement (bold)		0 1



United States Department of Agriculture

NRCS will:

 Prior to implementation, provide and explain NRCS Conservation Practice Standard Pest Management Conservation System (CPS 595) as it relates to implementing this enhancement.

□ As needed, provide technical assistance to the participant as requested.

 After implementation, verify implementation by reviewing records kept during enhancement implementation.

NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name	Contract Number
Total Acres Applied	Fiscal Year Completed
NRCS Technical Adequacy Signature	Date

E595E – Eliminate the use of chemical treatments	August 2019	
to control pests and to increase the presence of	MT Supplement November 2024	Page 3
dung beetles with Montana Supplement (bold)	••	0,

CONSERVATION STEWARDSHIP PROGRAM