United States Department of Agriculture
Natural Resources Conservation Service

2011 Ranking Period 1

Water Quality Enhancement Activity – WQL18 – Non-chemical pest management for livestock

Enhancement Description
The use of management, monitoring, and preventive techniques to manage external livestock pests without the use of pesticides.

Land Use Applicability
Pastureland, rangeland and forestland

Benefits
Environmental benefits will be operation specific. Benefits may include, but are not limited to improved animal health, reduced risk to humans and improved water quality.

Pests and parasites can have a significant impact on the economic viability of livestock operations by affecting the performance and health of animals. The improper use of chemical control methods can pose risks to animal and human health as well as water quality. Non-chemical pest management stratgies will require increased monitoring and management of livestock which should result in a higher overall level of management efficiency.

Criteria

1. Prepare a written plan addressing basic management considerations, including:
    a. Pests/parasites of concern, including correct species identification
    b. Monitoring process (jug traps, baited cards, on-livestock counts, fecal egg counts, FAMANCHA, etc) to determine when control is needed and to monitor control effectiveness
    c. Sanitation, cleaning feed/hay sites, and manure removal to reduce breeding sites
    d. Rotational grazing and how it will be used to disrupt pest life cycles, minimum residual forage height to reduce parasite ingestion.

2. Incorporate two or more of the following applications into the plan as appropriate:
    a. Provide non-invasive plants with secondary compounds such as tannins and terpenes that can reduce internal parasites when grazed by livestock.
    b. Provide for multi-species grazing to disrupt life cycles of host specific parasites.
    c. Monitor dung beetle populations and enhance by eliminating or significantly reducing use of detrimental injectable, pour-on, and especially bolus type pesticides.
    d. If dung beetle populations are essentially non-existent, harrow or otherwise mechanically treat manure piles to speed up drying and decomposition.
    e. Incorporate pastured poultry, such as portable poultry wagons, into pasture rotations to eat fly larvae, 2-3 days after livestock leave pasture.

f. Enhance populations of martins, swallows, and batas by providing roosts, nesting, and breeding sites as appropriate.

Documentation Requirements

1. Written plan that includes basic management considerations and specific selected prevention and monitoring techniques performed, including dates, effectiveness of applications, and other monitoring results.
2. Schedule of when grazing occurred on pastures and residual vegetation heights both at start and end of each grazing period.

ALABAMA SUPPLEMENTAL INFORMATION FOR ENHANCEMENT, WQL18, NON-CHEMICAL LIVESTOCK PEST CONTROL

Producer Name:	**Date:**
Farm No.	

Table 1 Task and Application Description

Tract & Field	Acres	Description of Management Techniques, Devises and Biological Agents Used	Date Employed	Rate Effective (High, Medium, Low)	Comments (additional monitoring)

Table 2 Grazing Schedule

Tract	Field	Acres	Number & Type of Animals	Start Grazing Date	Vegetation Height (in.) at Start of Gazing	End Grazing Date	Vegetative Height (in.) at End of Grazing

The submitted information accurately reflects the implementation of this enhancement.

SIGNATURE:_____Date:_____

June 2010