**Program: Drinking and Defecating Frequencies and Locations are Affected by the Presence of a Water Trough when Cattle Graze Near a Creek.**

P. H. Sharpe  
J. Pitty Del Cid  
D. R. McKnight  
A. Unc  
R. Marcelissen  
M. Goss

**UNIVERSITY OF GUELPH**  
**KEMPTVILLE CAMPUS**

**In Partnership With**  
**Rideau Valley Conservation Authority**

**Objective:**

The objective of this study was to determine the effect of a water trough in the paddock on the frequency and locations of drinking and defecation.

**Background:**

There have been few studies documenting the effects of cattle defecation on surface water quality in Canadian farming conditions. Thus there is a gap in understanding how provision of an alternate water source affects drinking and defecating behaviour in pastured cattle.

**Materials and Methods**

Approximately fifteen pregnant Holstein heifers.  
Rotationally grazed on a five acre pasture next to a creek in Kemptville, Ontario.  
Two treatments:  
T = Trough in Paddock  
NT = No Trough in Paddock

During the T treatment, heifers had a choice of drinking location but during NT they could only drink from the creek.  
Heifers were observed 12 hrs/day, 4 days/week, for 4 consecutive weeks in each treatment.  
Incidents of drinking and defecating (per zone: pasture, riparian, creek) were recorded.

**Summary**

The presence of a water trough in the paddock increased the frequency of drinking incidents away from the creek, decreased drinking incidents near the creek and decreased the number of defecations in or near the creek.

**Implications**

This study adds to the body of evidence that providing a water trough for pastured cattle may reduce the need for fencing cattle away from surface water.

**Support Appreciated from:**

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**Ontario Ministry of Agriculture, Food and Rural Affairs**

**Community Benefits Include:** Better environment and reduced cost of fencing