

# A composition study of a targeted sampling of Ixodidae family ticks and their pathogen status throughout the Flint Hills region of Kansas

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## Introduction

Bovine anaplasmosis is an economically significant disease of cattle concerning the producers and veterinary practitioners of the state of Kansas as well as the rest of the United States. Its transmission by iatrogenic vectors has been well classified. The role of persistently infected ticks in the transmission of *Anaplasma marginale* is also well known, but their role as biological magnifiers and their ability to harbor the bacteria in novel ecological areas warrant further examination. The objective of this study was to quantify the distribution and infection status of Ixodidae ticks throughout the rangeland of the Flint Hills region of Kansas.

## Materials and Methods

This sampling was performed during the months of May through August of 2016. Twenty-three collection sites were selected by producer permission with no randomization. The Flint Hills area was defined by the Western Ecology Division of the Environmental Protection Agency. Sites with

close proximity to the target region were also surveyed. Collection areas were productive grazing pastures, with and without grazing during the collection period. Questing ticks of all species and life-stages were collected.

## Results

In total, 5013 ticks were collected, including ticks of 2 genera and 3 species. The most frequently observed species was *Amblyomma americanum*, 93.7% of the total; *Dermacentor variabilis* and *Amblyomma maculatum* comprised 5.1% and 1.2%, respectively.

Tick analysis for pathogen association and frequency is on-going.

## Significance

Classifying the distribution and infection status of competent biological vectors of anaplasmosis will be instrumental in further epidemiology of the current and future presence of the disease in Kansas.

# Retrospective study of retroperitoneal abscess in cattle

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## Introduction

A retroperitoneal abscess is a collection of suppurative fluid between the peritoneum, the transverse and internal oblique muscles. It was reported in cattle following laparotomy. The objectives of this retrospective cases-series study are to describe the clinical signs, clinical pathological findings, treatment options and outcome.

## Materials and Methods

Medical records from the VMTH of the Université de Montréal between January 1995 and January 2017 were reviewed. To be included, the retroperitoneal abscess had

to have a diameter greater than 30 cm and at least 3.5 cm deep from the skin surface diagnosed by ultrasonography or rectal examination. Short term prognosis was defined as being discharged from hospital. Long term prognosis was evaluated for animals with more than 6-month life production by consulting the Canadian Dairy Network database.

## Results

Thirty-six medical records respected our inclusion criteria. They were Holstein females from 2.2- to 7-years-old (mean 4.1 SE 1.26). In 27 cases, the abscess was palpated per rectum (82%). Ultrasonography confirmed the presence of an abscess in all cases. Thirty-two cattle (89%) underwent flank