

A comparison study of common concerns and diseases of the small ruminant producer

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Introduction

Limited research has been published on the common concerns of small ruminant producers and their management practices. The problems affecting producers may differ depending on geographic location, economy and culture. The purpose of this study was to identify and compare the most important concerns and diseases among the small ruminant producers of St. Kitts and the Appalachia.

Materials and Methods

A total of 50 small ruminant producers on the island of St. Kitts and 51 in the Appalachia region surrounding Harrogate, TN participated in this non-randomized study. A questionnaire was administered on the farm regarding herd and flock management and concerns. Information gathered included, but was not limited to, nutrition, marketing, reproduction, major issues and diseases experienced. Chi-squared test of independence was used between subject tests and Chi-squared goodness of fit for within subject tests. Simple descriptive statistics were also utilized to analyze the data.

Results

The 4 greatest concerns of small ruminant producers on St. Kitts (of which there was no significant difference among the top 4) were dog attack (50%), improving genetics (36%), obtaining medications (35%), and theft (30%). In contrast, the primary concerns for Appalachian producers were internal parasites (55%), miscellaneous diseases (24%), hoof

disease (20%), and nutrition (10%). Internal parasites was a significantly higher concern than the other 3 ($P < 0.001$).

St. Kitts small ruminant producers did not list specific diseases in their top 4 issues. However, their top 3 specific diseases were internal parasites (76%), ticks (72%), and dermatophilus (36%) (where internal parasites and ticks were significantly more important than dermatophilus, $P < 0.05$). Whereas, the top 3 specific diseases for Appalachian producers were helminths (79%), hoof disease (42%), and coccidiosis (29%) (where helminths were significantly more important than hoof disease and coccidiosis, $P < 0.05$). There was a significant difference in the top disease concerns between the 2 sites ($P < 0.001$). Specifically, St. Kitts producers were significantly more concerned with ticks and dermatophilus and Appalachian producers were significantly more concerned with hoof disease and coccidiosis.

Significance

Issues facing small ruminant producers may differ substantially based on geographical location. Identifying the major concerns is a first step towards addressing the issues faced by the small ruminant producer. Producers on St. Kitts need help to reduce dog predation and theft, as well as easier means to improve genetics and obtain medications. Producers in the Appalachian region (as well as St. Kitts) need assistance with better parasite control and foot health.