

Climbing behaviour in lactating dairy goats: The use of a raised platform

G. Zobel,¹ MSc, PhD; H. Neave,² MSc; J. Webster,¹ MSc, PhD

¹AgResearch Ltd., Animal Welfare Team, Hamilton, 3213, New Zealand

²Animal Welfare Program, University of British Columbia, Vancouver, Canada

Introduction

Providing opportunities for the expression of natural behavior is an important component of good animal welfare. In a natural setting, goats readily climb; however, the extent to which naïve commercial dairy goats express this behavior is not known. This study aimed to determine the time lactating dairy goats, naïve to raised surfaces, would spend on a raised platform when given the opportunity.

Materials and Methods

A group of 12 multiparous Saanen-cross goats sourced from a commercial farm was provided with a platform (13.1 × 3.3 × 2.3 ft; 4 × 1 × 0.7 m, 35° ramp/each end) on rubber mats adjacent to an area bedded with wood shavings. Twice daily, goats were provided *ad libitum* access to fresh-cut pasture and silage. Goats also had *ad libitum* water and were given a corn-based supplement at milking (600 g/d total). After allowing for 7 days of acclimation to the platform, 2 48-h periods (excluding 2.7 h/d for milking) were video-recorded to determine platform use (lying/standing on platform, lying/standing under platform). Data was summarized per day for each goat, and PROC UNIVARIATE (SAS 9.3) was used to calculate descriptive statistics. Results are presented as mean ± SD.

Results

When interacting with the platform, goats spent 71 ± 23% of that time on top of the platform; however, 1 goat

opted to spend 81% of her platform interaction time under it. Goats spent 1.9 ± 0.8 h/d on top of the platform (range: 0.1 to 8.5 h/d depending on individual goats). Individual goats also expressed a preference for the behavior performed on the platform, with 3 goats spending 100% of their time standing, and 4 goats spending more than 85% of their time lying. A similar pattern was noted under the platform, where goats spent 0.9 ± 0.8 h/d under the platform (range: 0.1 to 5.6 h/d depending on the individual goat). While all goats stood under the platform for some proportion of the day, only 5 out of the 12 goats lay under the platform.

Significance

This work demonstrates that lactating dairy goats that have not interacted previously with climbing materials will use such space if given the opportunity. Interestingly, not all of this use was as we had hypothesized; some goats preferred to be under the platform when interacting with it, perhaps because it provided opportunity to hide and isolate from other goats. Further analysis will aim to determine how social dynamics within the group may have determined platform use.