

Creating animal-focused systems

Gosia Zobel, Heather Neave, Jim Webster

Commercial livestock systems, regardless of the species, are typically geared towards promoting good health and production of the animals. Other factors that might be important to the animals, such as ability to perform natural behaviours, do not necessarily take precedence. The Animal Welfare Team at AgResearch has been striving to explore shifts in management that can be more focused around animals' natural behaviours. These management shifts are often informed by the animals' preferences and are may be quite simple.

A recent example produced by the Animal Welfare Team examined potential alternative ways of offering feed to commercially housed goats, and was published in collaboration with the University of British Columbia's Animal Welfare Program (Canada).

Rather than grazing, as we are used to seeing cows and sheep doing, goats are natural browsers. They have been reported to spend anywhere between 20 and 90% of their feeding time sampling different types of vegetation. Some of this browsing time can be in a bi-pedal position where goats are perched on their rear legs and browse above their head level. Using such evidence, the recent study gave goats their daily feed ration at three different heights and let the goats 'vote with their feet'.

What happened was not entirely unsurprising, but was the first study of its kind to suggest that tapping into goats' natural motivation to eat from an elevated surface improves feed intake – and may therefore directly benefit farmers too since more feed consumed often equals better milk production!

Goats ate more from a feeder that allowed the goats to perch and feed above their head. They also visited this feeder more than when the feed was presented at a level that mimicked a grazing posture. An unexpected finding was that goats actually competed more to access this feed that was presented above their head. Since the feed was identical as offered in the other feeders, the increased competition is a good indication that the goats were keen to adopt the position promoted by the elevated feeder.

Interestingly, there are already farmers around the world exploring the option of presenting feed in this way. They provide a good example that simple changes to farming systems that promote natural behaviour and better meet the goats' needs are possible. And positively, some of these changes could actually improve production – which in turn is a positive situation for both the animals and the farmers.

Reference:

Neave et al. 2018. Feed intake and behavior of dairy goats when offered an elevated feed bunk. *Journal of Dairy Science* Vol. 101 No. 4, 2018

Feeders (from left to right): 1) floor level, or grazing posture, 2) head-level, 3) elevated-level with perch



Example of elevated feed bunk utilized on farm (in Ontario, Canada)

