



## 2016 Winners

## Surveying the use of antimicrobials by pastoralists in Narok County, Kenya

CHLOE DONOVAN (VETERINARY STUDENT - ROYAL VETERINARY COLLEGE)

"The opportunity gave me thought-provoking insight into the traditional farming practices of the Maasai people and demonstrated the challenges faced not only by farmers in such demanding conditions, but also by veterinarians practicing in the field."



Chloe applied to the Award so that she may visit Narok County in order to shed light on the ways in which veterinary drugs, particularly antimicrobials, are used in rural Kenya. With the help of an interpreter and local veterinarian, she conducted 22 interviews with livestock herders across the County in and around the Maasai Mara.

After analysing the collected qualitative information and using the wide range of data, Chloe decided to focus on three main research questions:

- Which antimicrobial classes are used by pastoralists?
- For what situations are antimicrobials
- Do pastoralists comply with administration instructions?

Chloe intends to continue her research in this area using the unused data alongside the University of Nairobi and VetAid Kenya.

## A comparison of the effect of 7-day gradual weaning and abrupt weaning on post-weaning growth rates of dairy heifer calves

SAMUEL BOWKER (VETERINARY SURGEON - WILLOWS FARM VETS, CHESHIRE)

"Weaning can have long-term impacts on the performance and productivity of dairy heifers, with post-weaning growth rates having effects on age at puberty, pre-calving weight and milk yield. It is therefore important to manage the weaning process in such a way as to maximise post-weaning growth rate."



Sustainable dairy farming requires efficient rearing of replacement heifers, with the importance of heifer growth rates becoming increasingly apparent. There is increasing evidence that early life management and performance, particularly pre- and post-weaning growth rates, appear to have significant impacts on heifer performance long term. This is thought to be due to epigenetics, the concept that early life environmental factors can have long term impacts on productivity, especially in relation to milk yield.

Samuel compared the effect of 7-day gradual weaning and abrupt weaning on postweaning growth rates of dairy heifer calves. Data was collected from 95 Holstein heifer calves from a 1 block-calving herd in Cheshire.

## Problems and benefits to livestock health of intensive grazing of ruminants in comparison to UK housed systems.

DAVID BREWSTER (INDEPENDENT AGRICULTURAL CONSULTANT, SCOTLAND)

"A sheep or cow has the same requirements to live in Scotland, New Zealand or Tasmania... The removal of subsidies in New Zealand meant that farmers had to be more self-reliant, along with their livestock. Some British and Scottish farmers have realised that they can do this with their subsidies, which has economic benefits."



There has recently been an increased interest and use of intensive grazing systems for ruminant livestock in the UK; consequently, the aim of this project was to highlight any health problems and benefits to grazing livestock. Australia and New Zealand are world leaders of ruminant grazing systems, so David undertook 3-week long study tour to research the topic in these two countries. A number of farms were visited to analyse the diseases of the holding and the number of cases per year. The farms visited abroad were mostly in Tasmania and the South Island of New Zealand as they have a similar climate to the UK.

Intensive grazing systems certainly increase efficiency and reduce the costs of production. The project set out to highlight any problems and benefits to ruminant health to ensure that land managers are a step ahead to further increase industry viability. Disease control methods were highlighted to improve animal health and welfare and reduce the burden of these animal diseases.