## Supplementary Material

## Quantification of behavioural variation among sheep grazing on pasture using accelerometer sensors

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Distribution of male rumination behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of female rumination behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of male idle behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of female idle behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of male walking behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of female walking behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of male licking behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Distribution of female licking behaviour per day. Probability density function of the number of animals was plotted against grazing (minutes per day). Bin width was set at 20 minutes.


Rumination distribution for males from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Rumination distribution for females from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Idle distribution for males from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Idle distribution for females from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Walking distribution for males from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Walking distribution for females from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Licking distribution for males from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.


Licking distribution for females from hour 0 to 23 . The $y$ axis is the probability density function of the number of animals and the $x$ axis is minutes of grazing per day. Bin width was set to one minute.

