# Publication List

### Journal articles

1. Duynisveld, John; Charmley, Ed. Potato processing waste in beef finishing diets; effects on performance, carcass and meat quality. Animal Production Science. 2016. Published on line 2 December 2016. <http://dx.doi.org/10.1071/AN16233>
2. Coates, Trevor; Flesch, T; McGinn, Sean; Charmley, Ed; Chen, Deli. Evaluating an eddy covariance technique to estimate point-source emissions and its potential application to grazing cattle. Agricultural and Forest Meteorology. 2017; 234:164-171.
3. Charmley, Ed; Williams, Richard; Moate, Peter; Hegarty, Roger; Herd, Robert; Oddy, Hutton; et al. A unified relationship between methane emissions and dry matter intake for Australian cattle receiving over 70% of their diet as forages. Animal Production Science. 2016; 56:169-180. <https://doi.org/10.1071/an15365>
4. Benvenutti, Marcelo; Coates, Trevor; Imaz, A; Flesch, T; Hill, Julian; Charmley, Ed; et al. The use of image analysis to determine the number and position of cattle at a water point. Computers and Electronics in Agriculture. 2015; 118:24-27.
5. McGinn, Sean; Flesch, T; Coates, Trevor; Charmley, Ed; Chen, Deli; Bai, Mae; et al. Evaluating dispersion modeling options to estimate methane emissions from grazing beef cattle. Journal of Environmental Quality. 2015; 44(1):97-102. <https://doi.org/10.2134/jeq2014.06.0275>
6. Tomkins, Nigel; Charmley, Ed. Herd-scale measurements of methane emissions from cattle grazing extensive sub-tropical grasslands using the open-path laser technique. Animal. 2015; 9(12 1):2029-2038. <https://doi.org/10.1017/S1751731115001688>
7. Gonzalez, Luciano; Bishop-Hurley, Greg; Henry, Dave; Charmley, Ed. Wireless sensor networks to study, monitor and manage cattle in grazing systems. Animal Production Science. 2014; 54:1687-1693.
8. Gonzalez, Luciano; Charmley, Ed; Henry, Beverley. Modelling methane emissions from remotely collected live weight data and faecal NIRS. Animal Production Science. 2014; 54:1980-1987.
9. Henry, Beverley; Charmley, Ed; Eckard, Richard; Gaughan, John; Hegarty, Roger. Livestock production in a changing climate: adaptation and mitigation research in Australia. Crop & Pasture Science. 2012; 63:191-202.
10. Kennedy, Peter; Charmley, Ed. Methane yields from Brahman cattle fed tropical grasses and legumes.. Animal Production Science. 2012; 52(1):225-239.
11. Bell, Alan; Charmley, Ed; Hunter, Bob. The Australasian beef industries - challenges and opportunities in the 21st century. Animal Frontiers. 2011; 1(2):10-19. <https://doi.org/10.2527/af.2011-0015>
12. McGinn, Sean; Turner, Debra; Tomkins, Nigel; Charmley, Ed; Bishop-Hurley, Greg; Chen, Deli. A non-intrusive measurement of methane emissions from grazing cattle. Journal of Environmental Quality. 2011; 40(1):22-27.
13. Tomkins, Nigel; McGinn, Sean; Turner, Debra; Charmley, Ed. Comparison of open-circuit respiration chambers with a micrometeorological method for determining methane emissions from beef cattle grazing a tropical pasture. Animal Feed Science and Technology. 2011; 166-167:240-247. <https://doi.org/10.1016/j.anifeedsci.2011.04.014>
14. Donaghy, Peter; Bray, Steven; Gowan, Rebecca; Rolfe, John; Stephens, Michael; Hoffmann, Madonna; et al. The Bioeconomic potential for agro-forestry in Australia's northern grazing systems. Small Scale Forestry. 2010; 9:463-484.
15. Tomkins, N.W.; O'Reagain, P.J.; Swain, D.; Bishop-Hurley, G.; Charmley, E. Determining the effect of stocking rate on the spatial distribution of cattle for the subtropical savannas. Rangeland Journal. 2009; 3(267-276):
16. Charmley, E.; Stephens, M.L.; Kennedy, P.M. Predicting livestock productivity and methane emissions in Northern Australia: development of a bio-economic modelling approach. Australian Journal of Experimental Agriculture. 2008; 48(1-2):109-113.
17. Charmley, Ed. Effects of postpartum energy intake and method of synchronization on reproductive performance of beef cows following fixed-time artificial insemination. Canadian Journal of Animal Science. 2008; 88:439-447.
18. Dove, H.; Charmley, E. Using the alkanes and long-chain alcohols of plant cuticular wax to estimate diet composition and the intakes of mixed forages in sheep consuming a known amount of alkane-labelled supplement. Animal 2: 1474-1485. 2008.

### Conference papers/Conference proceedings (selected)

1. Charmley, Ed; Bishop-Hurley, Greg. Impact of communication technologies on pastoralist societies. In: International Rangelands Congress; 17-22 July 2016; Saskatoon, Canada. IRC; 2016. 65-70.
2. Gonzalez, Luciano; Ramirez, Carlos; Charmley, Ed; Coates, David. Prediction of feed intake in growing beef cattle fed tropical forages. In: Australian Rangeland Society 17th Biennial Conference; September 12th 2012; Kunanurra, WA. Kununurra, WA: CSIRO Publishing; 2012. 50.
3. Charmley, Ed; McSweeney, Chris; Eady, Sandra. Strategies for measuring and reducing methane emissions from beef cattle in northern Australia. In: Northern Australia Beef Research Update Conference; August 2011; Darwin. North Australia Beef Research Council; 2011. 73-80.
4. Gonzalez, Luciano; Bishop-Hurley, Greg; McGavin, Sharon; Crossman, Chris; Charmley, Ed. Automatic monitoring of cattle behaviour to assess the relationships with performance in the rangelands. In: Northern Beef research Update Conference; 2 August 2011; Darwin. Proceedings of NABRUC: Northern Australia Beef Research Council; 2011. 149.
5. Gonzalez, Luciano; Bishop-Hurley, Greg; McGavin, Sharon; Crossman, Chris; Handcock, Rebecca; Charmley, Ed. Real-time monitoring of livestock, vegetation, environment and management in the dry tropics: CSIRO Lansdown Research Station. In: Northern Beef Research Update Conference; August 2011; Darwin. Proceedings of NABRUC: Northern Australia Beef Research Council; 2011. 150.
6. Ramirez, Carlos; Xixi, Li; Durmic, Zoey; Vercoe, Phil; Gardiner, Christopher; O'Neill, Christopher; et al. Assessment of tropical legumes using in vitro fermentation and near infrared reflectance spectroscopy methodologies to reduce methane emissions from pastoral systems. In: Greenhouse 2011; 4-8 April 2011; Cairns, Queensland. n/a; 2011. 2.
7. Tomkins, Nigel; O'Neill, Christopher; Charmley, Ed. Realising a whole farm systems approach to measuring and managing Carbon fluexs for beef production: Lansdown Research Station. In: Methane Conference; March 2011; Cairns. Conference committee; 2011. 150.
8. Tomkins, Nigel; McGinn, Sean; Turner, Debra; Charmley, Ed. Enteric methane emissions from grazing beef cattle measured using open path lasers. In: Greenhouse Gases and Animal Agriculture Conference; 3 - 8 October 2010; Banff, Canada. AFST; 2010. 3.
9. Charmley, Ed; Swain, Dave L.; Bishop-Hurley, Greg; Tomkins, Nigel. Monitoring livestock in extensive grazing systems for environmental and production outcomes. In: Proceedings of the 43rd Congress of the International Socity for Applied Ethology; 6-10 July, 2010; Cairns Convention Centre, Cairns, Qld.. Cairns, Qld.: The Society; 2009. 81.
10. Tomkins, N.W.; Kennedy, P.M.; Charmley, E. Determining the influence of tropical forages on rumen methanogensis for improved accounting of greenhouse gas emissions. In: Proceedings Greenhouse2009 Climate Change and Resources Conference; 23-26 March, 2009; Burswood Convention Centre, WA. WA: The Conference; 2009.
11. Charmley, E.; Tomkins, N.; Williams, S.; Stephens, M.L. Cattle don't necessarily prefer to graze in riparian zones. In: Proceedings of the Australian Rangeland Society 15th Biennial Conference - A climate of change in the rangelands; 28 September - 2 October, 2008; Charters Towers, QLD. Charters Towers, QLD: The Conference; 2008.

### Books/Book chapters

1. Ramirez, Carlos; Charmley, Ed. An integrated mitigation potential framework to assist sustainable extensive beef production in the tropics. In: Ghosh, P.K., editor/s. World Grasslands: Opportunities and Challenges. Jhansi, India: IGFRI; 2015. 417-436.
2. Thorburn, Peter; Robertson, Michael; Clothier, Brent; Snow, Val; Charmley, Ed; Sanderman, Jon; et al. Australia and New Zealand perspectives on climate change and agriculture. In: Daniel Hillel and Cynthia Rosenzweig, editor/s. Handbook of Climate Change and Agroecosystems: Global and Regional Aspects and Implications. Imperial College Press; 2012. 107-141. <https://doi.org/10.1142/p876>
3. Carlyle, JC; Charmley, E; Baldock, Jeff; Polglase, PJ; Keating, B. Agriculture greenhouse gases and mitigation options. In: Stokes, CJ; Howden, SM eds, editor/s. Adapting Agriculture to Climate Change: Preparing Australian Agriculture, Forestry and Fisheries for the Future. CSIRO PUBLISHING; 2010. 229-244.
4. Charmley, Ed. Reducing livestock enteric emissions and structural change in Industry. In: Keating, Brian; Grundy, Mike; Battaglia, Mike; Eady, Sandra Project team, editor/s. An Analysis of greenhouse gas mitigation and carbon biosequestration opportunities from rural land use. St Lucia, QLD.: CSIRO; 2009. 38-44.