Geophysical Research Abstracts
Vol. 20, EGU2018-19342, 2018
EGU General Assembly 2018

The meteorological and climatological context of the fodder crises in Ireland in 2012-2013

Kieran Hickey (1), Paul Leahy (1), Gerard Kiely (1), Myles Allen (2), Adam Pasik (1), and Lucía Hermida (1)

(1) Environmental Research Institute, University College Cork, Ireland, (2) Environmental Change Institute, Oxford University, UK

Ireland was affected by a very significant fodder crises in Ireland in late 2012 but particularly in early 2013. Irish agriculture is primarily based on grass production for dairy and livestock. There is constant pressure on farmers to ensure that sufficient hay and silage is harvested and stored for the winter months to ensure animals are fed when grass growth is minimal at best. The summer of 2012 saw below-average temperatures and sunshine hours and higher than average rainfall in June and July resulting in poor quantity and quality of fodder going into storage for the winter of 2012-13. This was followed by a cool and dry autumn which in turn was followed by a cold and wet winter exacerbating the fodder situation as farmers used up their available stocks quite quickly due to limited grass growth. The situation started to become critical with a very cold spring with mean seasonal temperatures up to 1.8 [U+F0B0]C below the long-term average and variable rainfall. The outcome of this exceptionally cold spring was a delay to the start of any significant grass growth. This in turn resulted in farmers running out of fodder. Many farmers become reliant on purchased fodder and feed until they no longer could afford it or in the case of fodder they could not find any to purchase. Only with a return to above average temperatures in June and July did the fodder crises abate. The fodder crises is estimated to have cost Irish agriculture at least 500 million euro. This cost was made up of additional expenditure on feed and fodder including the import of fodder from France, a reduction in milk production, early slaughtering of cattle due to lack of feed and approximately 23,000 livestock deaths. This paper will analyse the meteorological contribution to the fodder crisis of 2012-2013 and will provide an initial assessment of this complex event in the context of recent climate change and attribution.

Acknowledgements
This research was supported by the Irish Environment Protection Agency (Grant Award No. 2016-W-MS-23), for the project Tools for Climate Change Attribution of Extreme Weather Events in Ireland (ClimAtt)