

# Life, Earth & Environment Seminar Series

When: Thursday 8<sup>th</sup> December, 11 am – 12 pm

Where: Natural Resources Building, Lecture Theatre 1 (EM1)

## SOIL CARBON - EASY TO DEplete AND HARD TO ACCUMULATE

**Prof Graeme Blair and Dr Nelly Blair**

*UNE and Ourfing Partnership, Armidale*

There is much talk about being able to sequester C in soils and a scheme is in place in Australia to reward farmers for such accumulations. This seminar will demonstrate how difficult this is to achieve. Most disturbed soils have lower total C concentrations than natural systems but the C present is cycling faster and contributes to nutrient cycling and soil physical fertility. As agricultural productivity increases the residues retained in the system are generally of higher quality and consequently are broken down more rapidly by the soil biota hence the difficulty of sequestering soil C and maintaining high agricultural outputs. Data from short and long term (up to 155 years) experiments will be presented to support this hypothesis. These experiments have utilised stable and radioactive isotopes of C to identify C sources and pools.



### Biography

Graeme completed his PhD at Sydney University, was a Post-Doctoral Fellow at the University of Guelph in Canada and began working at UNE in 1970. After retiring in 2002, he has continued as an Honorary Fellow and most recently an Adjunct Professor. In 2000 he received the prestigious International Fertilizer Award for research contributing to the efficient use of mineral fertilisers. He was made a Fellow of the Australian Society of Agronomy Inc. in 2012 and awarded the C.M. Donald Medal by the Society in 2014 for his contributions to Australian Agronomy. The seminar is co-authored by Dr Nelly Blair who completed her PhD studies at UNE on soil C.



School of Environmental  
and Rural Science

Contact:

Dr Phil Bell: [pbell23@une.edu.au](mailto:pbell23@une.edu.au)

Dr Clare Stawski: [cstawsk2@une.edu.au](mailto:cstawsk2@une.edu.au)