

**Media Release:**

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## **Soil: The Key to Food Security, Ecosystem and Water Health**

*"A nation that destroys its soil destroys itself" – Franklin Roosevelt*

Soil holds more than 80 per cent of the world's carbon outside of oceans and is essential for ecosystem health, aquatic health and food security.

The Department of Natural Resources, Environment, The Arts and Sport (NRETAS), assisted the Northern Territory Agricultural Association (NTAgA) to undertake extensive soil testing in the Katherine region last week.

NRETAS Land and Vegetation Unit Acting Manager Jason Hill said soil knowledge is essential for all land uses, whether it be agriculture, rural living blocks or conservation.

"The methods of soil testing include field descriptions: describing the landform, slope and rock, the layers of the soil such as topsoil and subsoil, the texture, gravel, colour and structure which all builds a set of information about the soil and landscape," Mr Hill said.

"We'll also take a soil sample for laboratory analysis which will be able to tell us the percentages of carbon, clay and sand along with the pH levels and other soil chemistry.

"An important component of this study is the collection of detailed soil hydrology information such as the soil infiltration rates and water holding capacities of north Australian soils, this information could then be used to improve irrigation water use efficiency and ultimately reduce costly inputs.

"Information we collect during this field trip can then be applied to similar soils in the region."

NTAgA Project Officer Greg Owens said the testing, being done on the Peanut Company of Australia's farm in Katherine, is part of a National Landcare Program funded by the Australian Government to look at water efficiency.

"Soil information and knowledge of its behaviour is essential to good land management," Mr Owens said.

"Soil is an important key in recognising the water requirements of agricultural properties, once we know the soil properties we can combine this information with crop requirements so we can better assess water requirements and other inputs such as fertiliser needs.

Mr Hill said the Territory has a long history of soil investigation dating back to post World War II.

"While soil was traditionally investigated and mapped for agricultural purposes, soil information is now required for a much broader range of needs including water balance, carbon, biodiversity and suitability for rural residential areas," Mr Hill said.

"NRETAS is currently building up a single, comprehensive database of soil types that will be easily accessible for the general public, and this database of information will also enable us to rapidly calculate levels of soil carbon across the Territory."

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**Media Note – for more information contact Jason Hill on 8999 4443 or Greg Owens on 0407 018 373  
Image – Jason Hill (NRETAS) and Greg Owens (NTAgA) undertake soil testing in Katherine**

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