

# Australian Collaborative Land Evaluation Program

The Australian Collaborative Land Evaluation Program uses a cooperative approach to deliver a national soil information infrastructure.

The success of ACLEP is due to a strong commitment of partners to the vision that:

*'natural resource management in Australia is underpinned by appropriate soil and land resource information and knowledge to ensure sustainable economic and environmental systems'.*

ACLEP builds national capacity and strategic support for emerging priorities.

## Why are soils important?

Soil is the most complex biological material on the planet and an essential natural resource. Understanding and interpreting soil data and information is especially relevant for many environmental and economic issues facing the community now and in the future, such as:

- agricultural productivity and food security
- climate change mitigation through carbon sequestration
- urban infrastructure and agricultural development planning
- preventing land degradation, salinity, erosion, acidification
- conserving biodiversity and maintaining ecosystem services

## Partners

ACLEP is a partnership between CSIRO; the Australian Government Department of Agriculture, Fisheries and Forestry; and the state and territory agencies responsible for land resource assessment. ACLEP receives strategic direction through the National Committee on Soil and Terrain (NCST).



Australian Government  
Department of Agriculture,  
Fisheries and Forestry



*Grey Sodosol with classic columnar structure in the B horizon.*

## ACLEP aims to:

- provide coordinated, scientific assessment and monitoring of Australia's soil and land resources
- develop and promote methods and standards for soil measurement, land resource survey, and monitoring of soil condition
- build and support coordination, collaboration, partnerships, and development of skills and capacity through improved communication
- be the primary contact point for information on Australia's soil and land resources and related national assessments
- provide a focus for the collection, collation, management, dissemination and analysis of nationally consistent, integrated data and information on soil and land resources through the Australian Soil Resource Information System (ASRIS) ([www.asris.csiro.au](http://www.asris.csiro.au)) and the CSIRO National Soil Archive ([www.clw.csiro.au/aclep/archive](http://www.clw.csiro.au/aclep/archive)).

## New directions

ACLEP is developing and using new technologies to measure and predict soil properties, particularly where current soil information is unavailable to address national priorities. ACLEP is progressing:

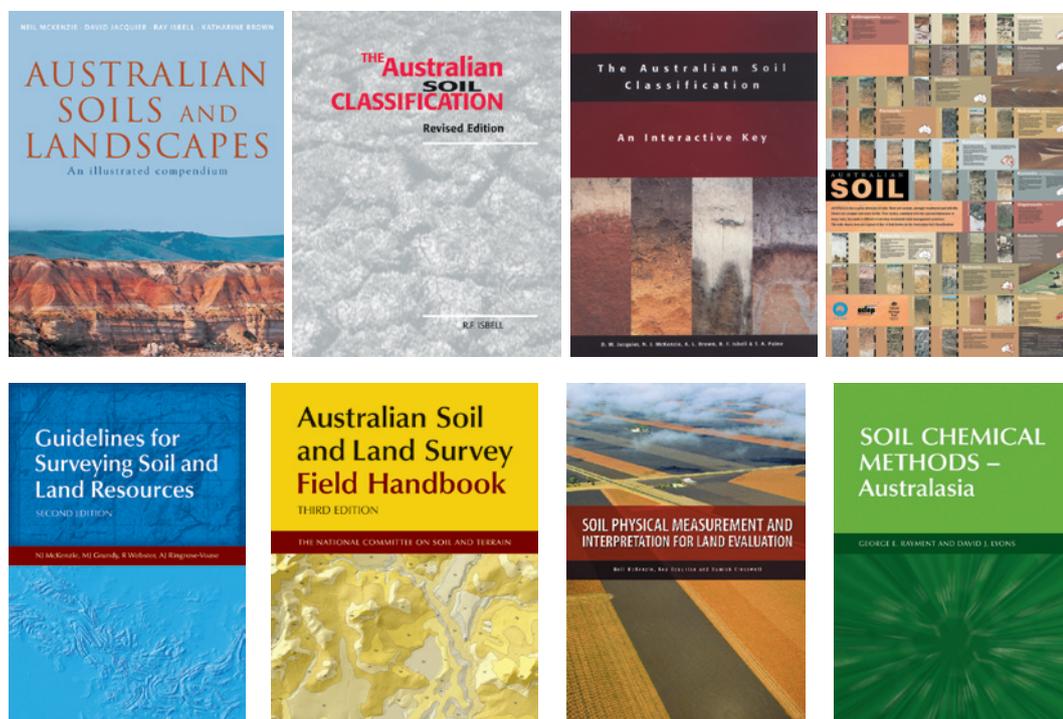
- new measurement techniques using proximal sensing such as Near and Mid Infra-Red scanning, gamma radiometrics and electro-magnetics
- digital soil assessment involving spatial modelling and prediction of attribute values, application of continuous depth spline functions and uncertainty analysis
- national, fine resolution gridded soil data sets providing input to local, regional and national assessments as well as international initiatives such as GlobalSoilMap.net
- information models and international standards for soils data.



*Red Kandosol in the wet tropics, north Queensland.*

## Publications

ACLEP improves community awareness and understanding of soils and related issues and supports education through publications on Australian soils and landscapes ([www.clw.csiro.au/aclep/publications](http://www.clw.csiro.au/aclep/publications)) including:



### Contact details

Australian Collaborative  
Land Evaluation Program  
CSIRO Land and Water  
GPO Box 1666, Canberra  
ACT 2601  
Email: [aclep@csiro.au](mailto:aclep@csiro.au)

