



Centre for Australian Forensic Soil Science

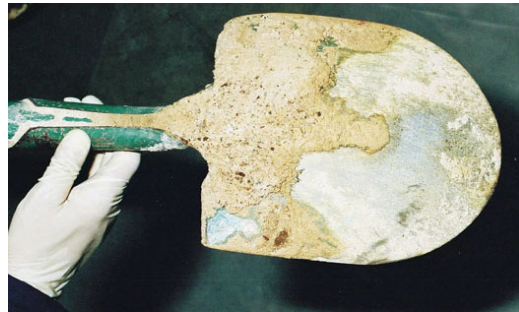
Purpose and Aims

- To promote efficient and effective use of resources, by establishing the first formal worldwide network of soil and forensic scientists that will maintain a critical mass of research expertise in soil forensics to fight crime, terrorism and environmental pollution.
- To promote science excellence and co-operation with stakeholders by conducting research and communicating results and analysis techniques to forensic scientists in Australia and internationally.
- To promote confidence in forensic soil science by performing in a direct service capacity for specific criminalistic and environmental forensic cases.
- To provide leadership and best management practice in forensic soil science.

Applied and research strengths

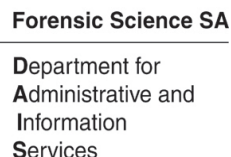
Produce new information about Australia's unique soil properties and apply it in cutting-edge and internationally collaborative forensic research projects involving the following five discipline areas of soil science:

- soil profiling
- soil chemistry
- soil mineralogy
- soil molecular diagnosis
- soil geophysics.



Activities

- Employ appropriate soil science techniques to assist in the search, location and recovery of soil and mineral samples from crime and/or disaster scenes in Australia or overseas
- Counter terrorism and crime by developing and employing new soil technologies
- Assist DSTO and forensic archaeologists with work on detection of near surface buried targets such as land mines, unexploded ordinance and graves
- Facilitate the transfer of expertise from international soil and forensic scientists to Australian researchers and industries in order to increase our national competitiveness in emerging technologies
- Undertake specialised soil analyses for Australian (State, Territory, Federal) and International Police, forensic science and environmental agencies
- Establish and contribute to collaborative research projects and focus groups (e.g. quality assurance) with these organisations
- Conduct workshops, seminars and training courses on soils for police, other institutional professionals and undergraduates
- Provide opportunities for postgraduate students to undertake research projects related directly or indirectly to questions posed by clients.





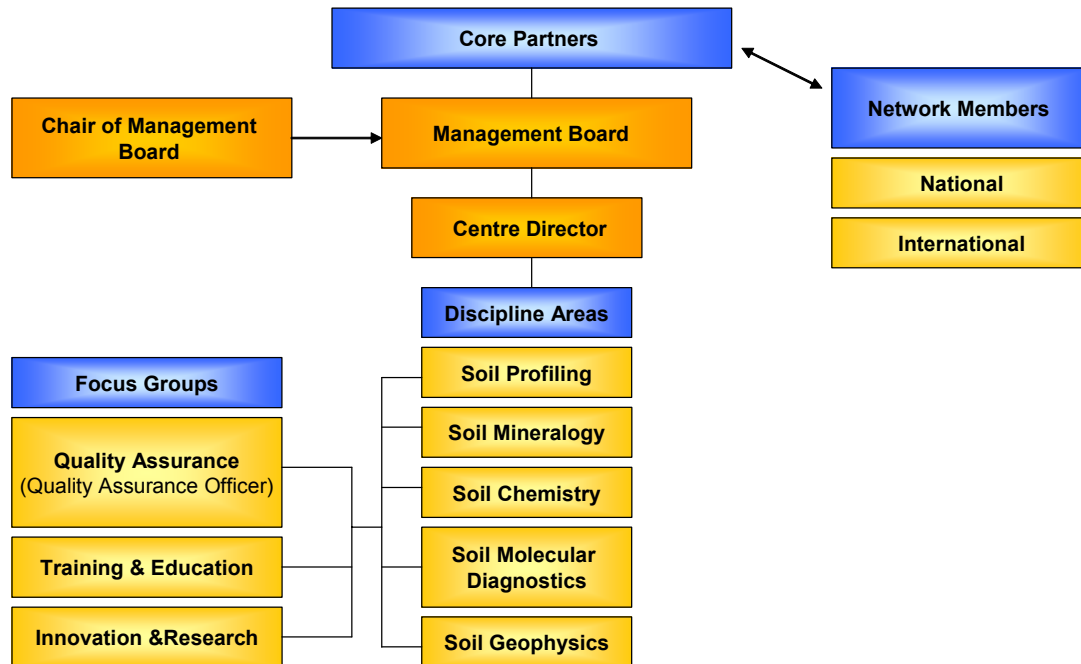
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Critical mass of expertise in Forensic Soil Science

CAFSS is a partnership between CSIRO, Forensic Science SA, The University of Adelaide, and Flinders University (Core Partners).

The centre incorporates Network Members from State, Territory, Federal (e.g. DSTO) government organisations and agencies, Universities, Police and international forensic science agencies. Also included are organisations such as NIFS (The National Institute of Forensic Science), SMANZFL (Senior Managers Australia New Zealand Forensic Laboratories), SET (Science, the Engineering & Technology Unit Of the Prime Minister & Cabinet) and private industries.

The Centre has a Management Board, which confirms and monitors strategic directions and ensures that the forensic soil science activities (focus groups concerned with quality assurance, innovation & research, and education & training) are performed in a financially sound manner with due regard for the relative merits of various national and international soil/forensic-related network members.



Contacts for further information

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Photograph: From CSIRO Land and Water, Pedology photography set.

Description: Detailed analysis of soil on the back of this shovel was used to help solve a homicide case.

Photographer: Senior Constable Michael Heath. © 2004CSIRO