BACKGROUND

Our land rehabilitation specialists are primarily involved in **understanding and managing the interrelationships between soils, plants, animals and other environmental conditions**. As a result, they provide innovative solutions and new technologies to:

- Evaluate, monitor, develop and implement natural resource management solutions for environmental and agricultural contexts
- Reclaim, rehabilitate and re-vegetate land
- Use land sustainably
- Conserve natural resources and environmental quality.

These services are underpinned by the scientific knowledge and practical experience of these specialists and a holistic approach towards land rehabilitation. In addition, our specialists have access to a wide range of key disciplines that form building blocks in the land rehabilitation solutions and technologies offered.

The land rehabilitation services division, under the leadership of Dr Wayne Truter, operates out of the Department of Plant Production and Soil Sciences at the University of Pretoria.

These services are available to industry through Business Enterprises at University of Pretoria (Pty) Ltd (BE at UP).

For more information, please contact

Business Enterprises at University of Pretoria (Pty) Ltd
Marketing Division
Tel: +27 (12) 420 4245/4247
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Website: www.be.up.co.za

PROFILE OF BUSINESS ENTERPRISES AT UNIVERSITY OF PRETORIA (PTY) LTD (BE at UP)

Business Enterprises at University of Pretoria (Pty) Ltd (BE at UP) is a company wholly owned by the University of Pretoria. Our main objective is to provide and facilitate easy access for all industry sectors to the multidisciplinary range of **contract research and consulting expertise** at the University.

Regardless of the industry sector in which your company operates, BE at UP can offer innovative and cutting-edge business solutions that will add true and sustainable value.

Selected services

- Spatial and land use planning, development and management
- Analysis and assessment of water samples to determine fitness for use for livestock, agriculture and human consumption
- Advanced statistical modelling and analyses
- The Benfield Natural Hazard Centre: Managing the risks of natural disasters on the African continent
- Advanced geological resources and intellectual capital
- Anthropology research and analysis of archaeological material
- Business process management solutions
- Consultation and research in Information Communication Technology (ICT)
- Consulting on policy formulation and implementation in areas of land and related natural resources, governance and regionalism and the development context
- Test range for testing antennae and radiation hazard monitors
- Specialised vibration and structural dynamics testing and analyses
- Economic analyses and forecasting

Visit our website at www.be.up.co.za.

BUSINESS ENTERPRISES
UNIVERSITY OF PRETORIA

University of Pretoria Hatfield Campus,
Lynnwood Road, Pretoria,
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PO Box 14679,
Hatfield, 0028

BUSINESS ENTERPRISES
UNIVERSITY OF PRETORIA

LAND REHABILITATION SERVICES

"Establishing and evaluating sustainable land use management systems on rehabilitated land"

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
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NATURAL AND AGRICULTURAL SCIENCES

SERVICES OFFERED INCLUDE:

Natural resource assessments

- Vegetation surveys
- Soil surveys
- Soil classification
- Soil depth measurements
- Top soil balances
- Background soil chemical, physical and microbiological analyses
- Potential impacts identification

Land use (Agricultural Land Capability) assessments

- Current land capability
  - Farmland
  - Natural grazing
  - Wetlands or sensitive areas
- Grazing capacity
- Vegetation biodiversity
- Plant yield calculations
- Resource mapping

Reclamation solutions

- Soil amendment recommendations
- Growth medium conditioning solutions (organic materials, etc.) and techniques
- Seeding mixtures and rates
- Adapted vegetation selections
- Vegetation methods and guidelines
  - Vegetative material
  - Seeding

Rehabilitation monitoring and adaptive management solutions

- Soil analyses (chemical, physical and microbiological)
- Vegetation monitoring (all land capability classes)
- Agricultural land use system economics

BENEFITS:

These land rehabilitation assessments and solutions allow clients to:

- Implement consistent record-keeping systems
- Quality control of environmental/ agricultural system implementation
- Measure inputs against outputs
- Continuously monitor rehabilitation progress and success
- Establish successional ecosystem trends
- Design adaptive management strategies
- Align standardised techniques with current research developments
- Provide scientifically representative data collection and analytical techniques
- Capture data in a central land rehabilitation database (available on request)

A SELECTION OF PREVIOUS PROJECTS:

- Environmental Impact Assessments (EIA) of soil and vegetation components
- Environmental Management Plans (EMP) of soil and vegetation components
- Rehabilitation guidelines for surface coal mines or degraded landscapes
- Assessment and monitoring of:
  - Rehabilitated surface coal mines
  - Rehabilitated discard dumps: coal
  - Waste disposal sites: ash, industrial waste, domestic waste
  - Rehabilitated pipelines
  - Rehabilitated servitudes
  - Sacrificial waste disposal sites: sewage farms
  - Degraded landscapes: overgrazed or eroded areas
  - Agricultural production systems
  - Soil and vegetation management plans (game farm or agricultural land uses)
  - Grazing management plans