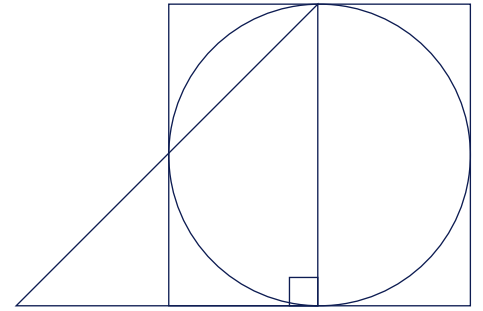


Report

05/06



Faculty of Natural and Agricultural Sciences



Faculty of Natural and Agricultural Sciences

Issued by:
Faculty of Natural and Agricultural Sciences,
University of the Free State

Editorial committee
Lacea Loader
Leonie Bolleurs

Language revision
Nanette Lötter

Revision of bibliographical data
Mercia Coetzee

Layout and cover design
Chrysalis advertising and publishing

Photographers
Gerhard Louw
Stephen Collett

Printing
Print 24

The Afrikaans version is also available on a compact disc
from the dean's office or on the university's website at
www.ufs.ac.za.

Cover page: Aspects of natural and agricultural sciences.

Contact details

Dean

Prof. Herman van Schalkwyk
+27 51 401 2535
hvs.sci@ufs.ac.za

Vice-Dean

Prof. Neil Heideman
+27 51 401 3855
heidemannj.sci@ufs.ac.za

Office of the Dean

Ms Lorinda Rust
+27 51 401 2322
rustl.sci@ufs.ac.za

Faculty Manager

Ms Corné Havemann
+27 51 401 2490
havemach.sci@ufs.ac.za

Liaison

Mr Nelis Maeder
+27 51 401 2531
maedecj.stg@ufs.ac.za

Physical address of the office of the Dean

Room 9A, Biology Building, Main
Campus, Bloemfontein

Postal address

University of the Free State
PO Box 339
Bloemfontein
South Africa
9300

Fax

+27 51 401 3728

Faculty website

www.ufs.ac.za

From the Dean's office



Prof. Herman van Schalkwyk.

The Faculty of Natural and Agricultural Sciences at the University of the Free State (UFS) leads the way in the practising of natural and agricultural sciences in South Africa and the highest levels of quality and credibility are reflected.

Our commitment, however, reaches far beyond just this. It reaches beyond the borders of the country and across continents; its multi-disciplinary and practical approach is vested in all the disciplines presented by the faculty.

In 2005/06 the Faculty experienced significant growth in measurable outputs. A contributing factor was the comprehensive apparatus strategy and plan which was implemented in 2005. With this strategy, university funds were used to leverage other funds in order to obtain huge discounts from suppliers of apparatus. In this way the faculty managed to obtain almost R50 million worth of apparatus in 2005.

The strategy was continued in 2006 when an agreement to the value of R7 542 531 was reached with Shimadzu, according to which apparatus was supplied to the faculty at discount prices. The agreement, which is valid for three years, entails the free replacement of apparatus which is purchased during this period with upgraded versions.

The new apparatus forms part of the UFS vision to compete internationally with quality research outputs in certain niche areas, to provide leadership in advanced training to students from the African continent and to establish the university as a leader among South African universities.

Two researchers with a B rating from the National Research Foundation (NRF) were also appointed. Both of these initiatives bore fruit and in 2006 the faculty increased its total research outputs by

about 13%. As an example, the Department of Chemistry's outputs increased by 100%.

The faculty has been bursting at the seams over the past couple of years. Student figures rose from 3 935 undergraduate, postgraduate and occasional students in 2005, to 4 224 in 2006. There is also strong representivity of students from other African countries and in 2005/06 almost 600 students studied at the faculty.

An extended B.Sc. programme has been presented to students since 2005. The programme aims at providing students who do not comply with all the requirements for the B.Sc. programme with the necessary sub-structure to complete the B.Sc. degree successfully. A preliminary evaluation of the results indicates that the programme is delivering the desired results.

The alignment of the Qwaqwa Campus, which was incorporated into the UFS in January 2003, remains a challenge. Regular discussions are held with staff on the campus in order to make the faculty's programmes more sustainable and to align it with the broader strategic plan of the UFS.

On a national level, the faculty is in the process of making its mark in terms of teaching and community service. In 2005 the faculty again actively began utilising its

experimental farms. A three-way agreement between the UFS, the National Farmers Union (NAFU) and the Mangaung Local Municipality led to the establishment of the Lengau Agricultural Development Centre on the Sydenham Experimental Farm. The centre provides training and mentorship to small-scale upcoming farmers.

To be dynamic and progressive requires innovative thinking. It requires commitment and a desire to deliver excellent teaching and learning opportunities to students. It requires a willingness to form partnerships, and a multi-disciplinary and practical approach to the tertiary education environment in South Africa.

This report covers the faculty's activities in 2005/06. It is a reflection of two years' commitment on the part of a team of skilled and motivated academics and support staff.



Prof. Herman van Schalkwyk

Dean: Faculty of Natural and Agricultural Sciences
University of the Free State

Department of

Geography



“We draw from natural and social sciences to research solutions for problems in the human and bio-physical worlds.”

Prof. Peter Holmes.

Overview

In the light of the strategic aims of both the university and the Faculty of Natural and Agricultural Sciences, the Department of Geography continues to make its mark in terms of teaching, community service, and in particular, research. The number of publications in accredited journals, as measured against the staff complement at the Bloemfontein Campus, demonstrates the considerable productivity of the department in terms of measurable outputs.

The Geographical Information Systems (GIS) laboratory, under the direction of Dr Charles Barker, was expanded in 2005 with the addition of 12 new computers, bringing the total to 28. The GIS software was upgraded and additional programmes were purchased to facilitate the teaching of remote sensing, image processing, photo interpretation and photogrammetry at undergraduate level. In addition, new software and an upgraded network permit interactive on-screen teaching. The GIS facility continues to serve the GIS needs of the wider university community. The Physical Geography laboratory was also upgraded, thanks to the purchase, through the faculty's equipment drive, of new equipment for soil and sediment analyses.

In 2006 there was a significant expansion in the number of undergraduate students enrolling for Geography programmes through the Faculties of Natural and Agricultural Sciences and the Humanities. This put a strain on both human and physical resources, particularly with regard to GIS practical classes. The GIS laboratory was again upgraded in terms of the software needed to teach this hands-on subject to both undergraduate and postgraduate classes.

International visitors to the department during 2005/06 included the distinguished academic, Prof. David Thomas of the University of Oxford in the United Kingdom (UK), who is a world-renowned expert in the field of environmental change in arid environments, Dr Giles Wiggs, an expert on aeolian sediment transfer, also from Oxford and Dr Mark Bateman from the University of Sheffield in the UK. They are involved in research on environmental change in the western Free State under the leadership of Prof. Peter Holmes, Departmental



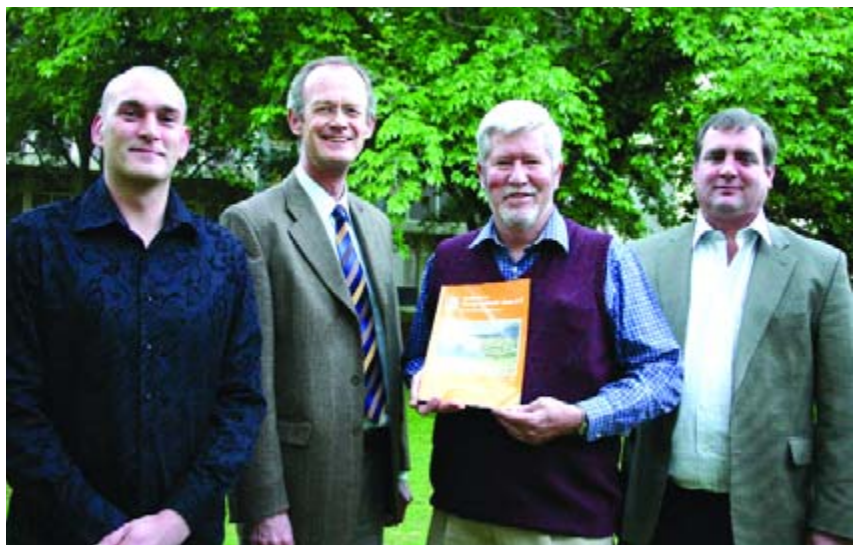
Chairperson. The research is funded by the National Research Foundation (NRF).

Community service manifested itself on both the Bloemfontein and Qwaqwa Campuses in terms of Prof. Willie van Zyl and Mr Alex Adjei's training of tourism officers in Lesotho and the Free State. The strategy in terms of the training in Responsible Tourism was to empower communities to understand and promote responsible tourism in their local environments. Selected tourism officials from all local municipalities in the Free State attended the workshops. Prof. Van Zyl and Mr Adjei continued with the training of government officials (Community Environmental Workers). This initiative was sponsored by the Department of Environmental Affairs and Tourism. Mr Adjei was involved in devel-

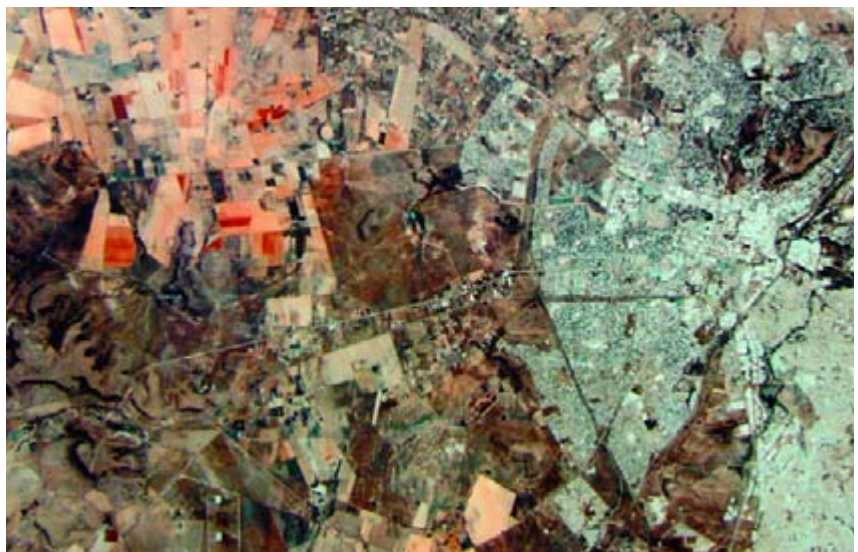
oping the Maluti-A-Phofung Local Municipality's tourism sector plan. A group of 24 tour operators from Lesotho was also trained on the Qwaqwa Campus. This initiative involved all staff members of the Department of Geography on the Qwaqwa Campus.

Ms Sheila Vrahimis served on the South African National Parks Board during 2005 and the first half of 2006. Dr Gustav Visser (now Prof. Visser) served in both 2005/06 on the Standards Generating Body for Geography of the South African Qualifications Authority (SAQA).

Both the Qwaqwa and Bloemfontein Campuses were actively involved in hosting Geography learners from various Free State and Northern Cape high schools, introducing them to the subject and its career possibilities.



The department launched a special edition of the South African Geographical Journal, entitled: *A Geography of the Free State*. Some of the guests attending the occasion are, from the left: Prof. Gustav Visser, Lecturer in the department and co-author of this special edition of the journal, Teuns Verschoor, Vice-Rector: Academic Operations at the UFS, Peter Holmes, Departmental Chairperson and co-author of the special edition of the journal, and Herman van Schalkwyk, Dean: Faculty of Natural and Agricultural Sciences at the UFS.



ASTER satellite photo of Bloemfontein.

"A highlight of 2006 was the publication of a special issue of the *South African Geographical Journal* entitled: *A Geography of the Free State.*"

The situation regarding postgraduate student numbers remains strong, with two doctoral students, 24 master's students and 17 honours students registered at the department in 2005 and four doctoral students, 16 master's students and 21 honours students registered in 2006.

In 2005 a group of students attended the annual Student Conference presented by the Society of South African Geographers (SSAG) in Belville, Cape Town. A group of students also attended the Student Conference in 2006, in Pietermaritzburg.

Proff. Holmes and Visser presented papers at international conferences during 2005, but the highlight of the year was the Biannual Conference of the Society of South African Geographers held in Bellville, Cape Town. Eight of the ten academic staff members (all but one from the Bloemfontein Campus, plus two from the Qwaqwa Campus) presented papers. In addition, Ms Liesel Cronjé, departmental secretary on the Bloemfontein Campus, presented a paper based on her recently completed M.Sc. in medical geography.

In 2006 three staff members presented papers at international conferences, including a plenary address by Prof. Visser at the International Geographical Union conference in Brisbane, Australia. In addition, Prof. Visser presented papers at both the main conference and the pre-conference symposium

before visiting the University of Otago, New Zealand, where he presented papers at the Department of Tourism's Research Seminar Series.

A highlight of 2006 was the publication of a special issue of the *South African Geographical Journal* entitled: *A Geography of the Free State*. This was co-edited by Proff. Visser and Holmes. It is the first time in the history of the journal that an issue devoted to the geography of a single province has been published.

Staffing has remained reasonably stable, with one additional staff member, Ms Robyn Mellet, being appointed on a three-year contract as a junior lecturer on the Qwaqwa Campus as from 2006. Later in 2006 Ms Mellet resigned. Prof. Nico Kotze moved from Bloemfontein to the University of Johannesburg to take up an academic appointment as head of Geography and Prof. Van Zyl was seconded to the post of academic co-ordinator on the Qwaqwa Campus. There is a strong likelihood of new appointments on both campuses in 2007.

Ms Vrahimis and Ms Tobeka Mehlomakhulu moved from the Vista Campus to the Bloemfontein Campus in 2005, thus bringing the complement of academic staff on this campus to seven, with four academic staff members on the Qwaqwa Campus from the beginning of 2006. Mrs Vrahimis' experience in working with under-prepared students will benefit the four-year B.Sc. degree programme greatly.

Dr Visser was promoted to senior lecturer at the beginning of 2005 and was appointed as associate professor in 2006. He received an Y1 rating in the previous round of NRF evaluations.

Ms Eldalize Kruger, who has commenced her Ph.D. studies under the guidance of Dr Barker, was promoted from junior lecturer to lecturer, while Dr Barker received a special increment in recognition of his administrative and teaching contributions within the department.

The department now demonstrates established research expertise in Human Geography (with the focus on tourism-led urban regeneration), Physical Geography (focusing on late Quaternary palaeo-environments) and in GIS. It is rapidly consolidating its identity in both teaching and research within these fields.

Prof. Van Zyl and Mr Alex Adjei of the Qwaqwa Campus are NRF grant holders and are involved in tourism research in the Eastern Free State. The potential for research into resource management in the Eastern Free State is being investigated by Dr Hennie Claassen.



Wind erosion in the Free State is a potential problem.

Academic staff

Main Campus

Professor: Prof. Peter Holmes

Associate Professors: Proff. Gustav Visser, Nico Kotze

Senior Lecturers: Dr Charles Barker,
Lecturers: Mss Tobeka Mehlomakhulu, Sheila Vrahimis, Eldalize Kruger

Qwaqwa Campus

Associate Professor: Prof. Willie van Zyl

Senior Lecturer: Dr Hennie Claassen
Lecturer: Mr Alex Adjei

Contact details

Prof. Peter Holmes
Department of Geography
University of the Free State
PO Box 339
Bloemfontein
South Africa
9300

Telephone: +27 51 401 2255

Fax: +27 51 401 3816

E-mail: holmespj.sci@ufs.ac.za

Website: www.ufs.ac.za

Research outputs

Publications

Boardman, J., Holmes, P.J., Bateman, M.D. & Rhodes, E.J. 2005. Colluvial fan gravels, depositional environments and luminescence dating: A Karoo case study. *South African Geographical Journal* 87: 73-79.

Cronjé, L. & Barker, C.H. 2006. Tuberculosis in the Free State Province: Present trends, future prognosis. *South African Geographical Journal* 88(1): 39-47.

Dippenaar, S. & Kotze, N. 2005. People with disabilities and nature tourism: A South Africa case study. *Social Work* 41(1): 96-108.

Holmes, P.J. & Barker, C.H. 2006. Geological and geomorphological controls on the physical landscape of the Free State. *South African Geographical Journal* 88(1): 3-10.

Hoogendoorn, G., Mellett, R. & Visser, G. 2005. Second homes as urban tourism: Case studies from South Africa. *Urban Forum* 16(2/3): 112-154.

Kotze, N.J. 2005. An analysis of the key characteristics of the Free State Province's tourism product. *Acta Academica Supplementum* 4: 46-84.

Kotze, N.J. 2006. Housing the elderly in South Africa: A Free State case study. *South African Geographical Journal* 88(1): 32-38.

Kruger, E. & Chapman, O.A. 2005. Quality aspects of Environmental Impact Assessment Reports in the Free State Province, South Africa. *South African Geographical Journal* 87: 52-57.

Marker, M.E. & Holmes, P.J. 2005. Landscape evolution and landscape sensitivity: The case of the Southern Cape. *South African Journal of Science* 101: 53-60.

Msilimba, G.G. & Holmes, P.J. 2005. A landslide hazard assessment and vulnerability appraisal procedure: Vunguvungu/Banga Catchment, Northern Malawi. *Natural Hazards* 34: 199-216.

Rogerson, C.M. & Visser, G. 2005. Tourism in urban Africa: The South African experience. *Urban Forum* 16(2/3): 63-87.

Rogerson, C.M. & Visser, G. 2006. International tourist flows and urban tourism in South Africa. *Urban Forum* 17(2): 199-213.

Schuurmans, N. & Visser, G. 2005. On poor whites in post-apartheid cities: The case of Bloemfontein. *Urban Forum* 16(4): 259-294.

Visser, G. 2005. Festival tourism in South Africa: Progress and prospect. *Urban Forum* 16(2/3): 155-175.

Visser, G. 2006. A tourism development strategy for the Free State Province. *Acta Academica, Supplementum* 4: 117-137.

Visser, G. 2006. An analysis of current tourism trends in South Africa and the Free State. *Acta Academica, Supplementum* 4: 1-45.

Visser, G. 2006. Post-script: A regional geography of the Free State. *South African Geographical Journal* 88(1): 111-113.

Visser, G. 2006. South Africa has second homes too! An exploration of the unexplored. *Current Issues in Tourism* 9(4/5): 351-383.

Visser, G. & Kotze, N. 2006. The Free State tourism economy: Current dynamics, immediate challenges and future research prospects. *South African Geographical Journal* 88(1): 88-101.

Visser, G., Kotze, N. & Rogerson, C.M. 2005. A tourism development strategy for the Free State Province. *Acta Academica Supplementum* 4: 117-137.

Vrahimis, S. & Visser, G. 2006. Institutional impediments to the implementation of the Maloti Drakensberg Transfrontier Conservation and Development Project: The case of the Free State Government. *South African Geographical Journal* 88(1): 102-110.

Chapters in books

Donaldson, R. & Kotze, N.J. 2006. Polokwane: From an apartheid to a transformed South African City. In: *Kulturgeographie der Stadt, Band 111*, edited by P. Gans, A. Priebis & R. Wehrhahn. Germany: University Kiel. pp. 509-521.

Visser, G. 2005. The local development impacts of backpacker tourism: Evidence from the South African experience. In *Local Economic Development in the Developing World: The experience of Southern Africa*, edited by E. Nel & C.M. Rogerson. New Brunswick: Transaction Publishers. pp. 267-296.

Conference contributions

Adjei, A. 2005. *Sustainable tourism, pro-poor tourism, responsible tourism and fair trade in tourism - convergence or divergence?* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Adjei, A. 2006. *Rural migration reversed: The impact of second homes on the black community of Clarens in the Eastern Free State, South Africa.* Paper presented at the International Tourism Conference, University of Lodz, Poland.

Barker, C.H. 2005. *The applicability of SRTM data for topographical modelling in South Africa.* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Cronjé, L. 2005. *An investigation into the 2001 distribution of tuberculosis in the Free State.* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Holmes, P.J., Bateman, M.D. & Carr, A.S. 2005. *Past coastal reconfigurations of the Southern Cape coast, South Africa.* Paper presented at the Southern African Society for Quaternary Research, Biennial Conference, Bloemfontein, South Africa.

Holmes, P.J., Bateman, M.D. & Carr, A.S. 2005. *Past coastal reconfigurations of the Southern Cape, South Africa.* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Holmes, P.J., Bateman, M.D. & Carr, A.S. 2006. *The Barrier Dunes of the Southern Cape, South Africa: Evidence of long-term marine-terrestrial recycling.* Paper presented at the Southern

African Association of Geomorphologists Biennial Conference, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

Holmes, P.J., Bateman, M.D., Thomas, D.S.G., Barker, C.H. & Wiggs, G.F.S. 2006. *Aeolian activity and Lunette dune sedimentation on the Free State Highveld of South Africa.* Paper presented at the 6th International Conference on Aeolian Research, University of Guelph, Canada.

Holmes, P.J., Thomas, D.S.G., Wiggs, G. & Bateman, M.D. 2005. *Palaeo- and present day aeolian processes on the Free State Highveld of South Africa.* Paper presented at the Drylands Conference: Linking landscape processes to sedimentary environments, Geological Society, London, UK.

Kotze, N.J. 2005. *Housing the elderly in South Africa: A case study from the Free State Province.* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Mehlomakhulu, T.C. 2005. *The integrated sustainable rural development programme in Maluti-a-Phofung: What does it mean for youth?* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Van Zyl, W.F. 2005. *Gear up for responsible tourism.* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Visser, G. 2005. *Responsible tourism and tourism-resort development in South Africa: A contradiction in terms?* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Visser, G. 2006. *Homonormalising heterosexual leisure spaces: The case of Bloemfontein.* Paper presented at the International Geographical Union (IGU) Conference, Brisbane, Australia.

Visser, G. 2006. *The South African Research Foundation's researcher rating system: International connections and local disjunctures.* Paper presented at the International Geographical Union (IGU) Conference: Commission on Tourism, Leisure and Global Change Pre-Symposium, Brisbane, Australia.

Visser, G. 2006. *Tourism after oil? Re-thinking Southern African pro-poor opportunities.* Paper presented at the International Geographical Union (IGU) Conference, Brisbane, Australia.

Visser, G. & Schuurmans, N. 2005. *Unvoiced and invisible: Reflections on white poverty in post-apartheid South Africa.* Paper presented at the Royal Geographical Society and Institute of British Geographers Conference, London, UK.

Vrahimis, S. 2005. *Institutional impediments in the development of nature based tourism potential on provincial reserves in the Free State.* Paper presented at the Society of South African Geographers Biennial Conference, University of the Western Cape, Bellville, South Africa.

Statistical data of the faculty



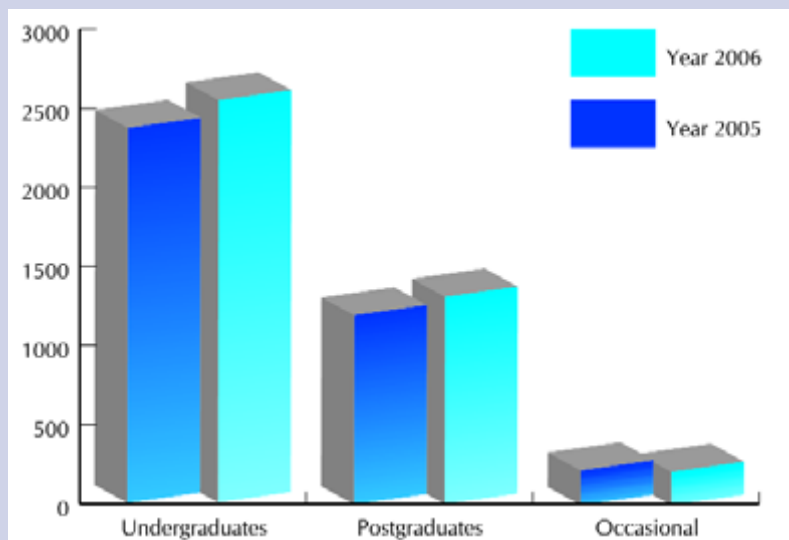
Student figures

Faculty of Natural and Agricultural Sciences, 2005/06

Male					
2005					
Description	African	Coloured	Indian	White	Total
Undergraduate	676	31	26	724	1457
Postgraduate	351	22	15	400	788
Occasional	84	3	4	17	108
Total 2005	1111	56	45	1141	2353
2006					
Description	African	Coloured	Indian	White	Total
Undergraduate	729	28	21	768	1546
Postgraduate	385	21	16	431	853
Occasional	68	2	2	23	95
Total 2006	1182	51	39	1222	2494

Female					
2005					
Description	African	Coloured	Indian	White	Total
Undergraduate	563	41	11	394	1009
Postgraduate	206	16	11	221	454
Occasional	101	5	2	11	119
Total 2005	870	62	24	626	1582
2006					
Description	African	Coloured	Indian	White	Total
Undergraduate	641	39	17	401	1098
Postgraduate	243	15	17	234	509
Occasional	103	2	2	16	123
Total 2006	987	56	36	651	1730

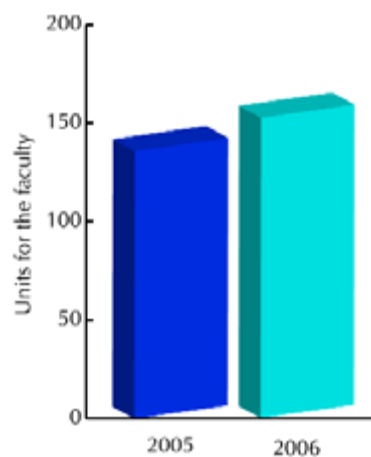
Total					
2005					
Description	African	Coloured	Indian	White	Total
Undergraduate	1239	72	37	1118	2466
Postgraduate	557	38	26	621	1242
Occasional	185	8	6	28	227
Total 2005	1981	118	69	1767	3935
2006					
Description	African	Coloured	Indian	White	Total
Undergraduate	1370	67	38	1169	2644
Postgraduate	628	36	33	665	1362
Occasional	171	4	4	39	218
Total 2006	2169	107	75	1873	4224



Student figures

Student nationality		
Nationality	2005	2006
Angola	1	
Asian countries	21	18
Botswana	20	20
European countries	6	6
Lesotho	142	142
Malawi	2	1
Mauritius		2
Mozambique	8	7
Namibia	40	42
No information	1	
North America	4	4
Other Africa	45	48
South Africa	3610	3893
South America		1
Swaziland	13	13
Zambia	4	6
Zimbabwe	18	21
Total	3935	4224

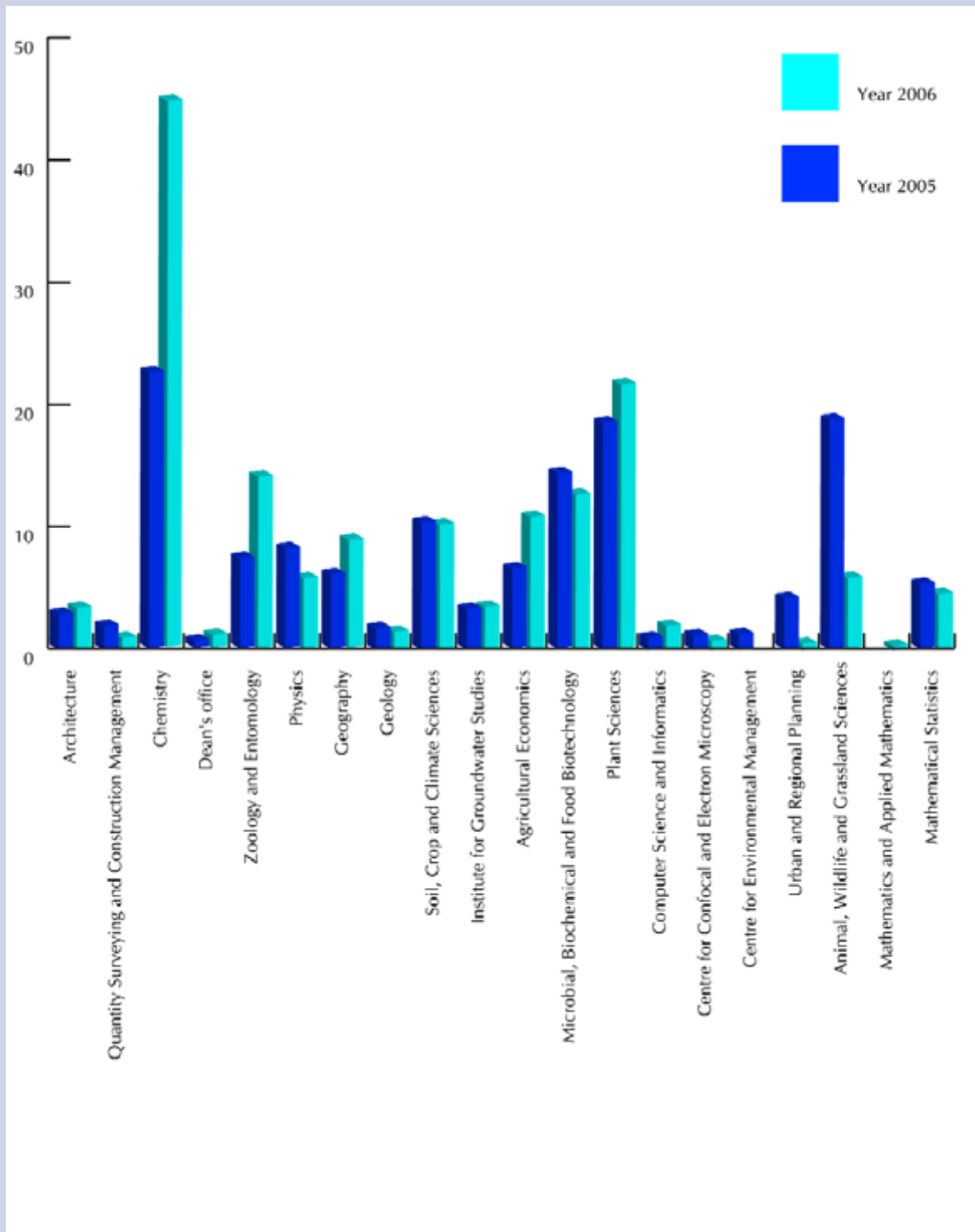
Research outputs for the Faculty of Natural and Agricultural Sciences



Articles published in accredited approved research journals.

Departmental research outputs

Articles published in accredited approved research journals, 2005/06



Glossary



Glossary

A

ACIAR	Australian Centre for International Agricultural Research
AEASA	Agricultural Economics Association of South Africa
ALPRU	African Large Predator Research Unit
ARC	Agricultural Research Council
ARMSCOR	Armaments Corporation of South Africa
ARS	Agri Risk Specialists
ASAQS	Association of South African Quantity Surveyors
ASSA	Anatomical Society of South Africa
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
AVS	American Vacuum Society

C

CANSA	Cancer Association of South Africa
CATSA	Catalysis Society of South Africa
CBD	Convention of Biological Diversity
CCEM	Centre for Confocal and Electron Microscopy
CePHMa	Centre for Plant Health Management
CfPB	Centre for People and Buildings
CIAT	International Centre for Tropical Agriculture
CIDB	Construction Industry Development Board
CIMMYT	International Maize and Wheat Improvement Centre
CIOB	Chartered Institute of Building
CIOB-SA	Chartered Institute of Building - South Africa
CSACEE	Central South African Council on Economic Education
CSIC-INTA	Centro de Astrobiología
CSIR	Council for Scientific and Industrial Research
CSIRO	Commonwealth Scientific and Industrial Research Organisation

D

DEAT	Department of Environmental Affairs and Tourism
DiMTEC	Disaster Management Training and Education Centre for Africa
DMISA	Disaster Management Institute of South Africa
DST	Department of Science and Technology

E

EAAP	European Association for Animal Production
EASA	Education Association of South Africa
ECA	European Crystallographic Association
EIGG	Environmental Inorganic Geochemistry Group
EPWP	Expanded Public Works Programme
ESBES	European Symposium on Biochemical Engineering Science
ESREL	European Safety and Reliability
ESRP	Economic and Social Rehabilitation Programme

F

FAO	Food and Agriculture Organisation
FEMS	Federation of European Microbiological Societies
FMP	Facilities Management Programme
FOTIM	Foundation of Tertiary Institutions of the Northern Metropolis

FSRPO

Free State Red Meat Producers Organisation

G

GIS	Geographical Information Systems
Glen ADI	Glen Agricultural Development Institute
GM	Genetically Modified
GMBA	Gauteng Master Builders' Association
GMO	Genetically Modified Organisms
GWK	Griekwaland-Wes Koöperasie

H

HIV	Human Immunodeficiency Virus
HPCSA	Health Professions Council of South Africa
HPLC	High Performance Liquid Chromatography
HSPCM	Health and Safety Programme for Construction Managers

I

IAGOD	International Association on the Genesis of Ore Deposits
IAH	International Association of Hydrogeologists
ICCC	International Conference on Coordination Chemistry
ICEC	International Cost Engineering Council
ICID	International Commission on Irrigation and Drainage
ICP	Inductively Coupled Plasma
ICRBM	International Conference on Rodent Biology and Management
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IDC	Industrial Development Corporation
IGS	Institute for Groundwater Studies
IITA	International Institute of Tropical Agriculture
INCRoP	Insects on New Crops Programme
INTSORMIL	International Sorghum and Millet Research Support Programme

IPMA

International Project Management Association

IPMP

Intensive Project Management Programme

IRDP

Institutional Research and Development Programme

IRWH

In-field Rainwater Harvesting

IUCr

International Union of Crystallography

IUMS

International Union of Microbial Societies

IUPAP

International Union of Pure and Applied Physics

J

JFM	Journal of Facilities Management
-----	----------------------------------

L

LExEn	Life in Extreme Environments
-------	------------------------------

M

MIRCHEN	Microbiological Resources Centre
MIT	Massachusetts Institute of Technology
MRM	Mineral Resource Management
MSA	Master's Degree in Sustainable Agriculture
MSSA	Microscopy Society of Southern Africa
MUCPP	Mangaung University Community Partnership Programme
MURP	Master's Degree in Urban and Regional Planning

N

NaCOF	National Climate Outlook Forum
NAFU	National African Farmers Union
NAMC	National Agricultural Marketing Council
NASA	National Aeronautics and Space Administration
NASSP	National Astrophysics and Space Science Programme
NCEE	National Council for Economic Education
NDA	National Department of Agriculture
NECSA	National Energy Commission of South Africa
NELSAM	Natural Earthquake Laboratory in South African Mines
NERPO	National Emergent Red Meat Producers' Organisation
NGO	Non-Governmental Organisation
NML	National Metrological Laboratory
NMMU	Nelson Mandela Metropolitan University
NMR	Nuclear Magnetic Resonance
NRF	National Research Foundation
NUFU	Norwegian Council of Universities Committee for Development, Research and Education
NWGA	National Wool Growers' Association

O

OABS	Optimal Agricultural Business Solutions
OECD	Organisation for Economic Co-operation and Development

P

PARSA	Parasitological Association of Southern Africa
PDMIW	Processing and Disposal of Mineral Industry Wastes
POT	Peaks over Threshold
PPP	Public Private Partnership
PRT	Protein Research Trust

R

RICS	Royal Institute of Chartered Surveyors
RIEP	Research Institute of Education Planning
RNA	Research Niche Area
RPO	Red Meat Producers' Organisation

S

SA	South Africa
SAACE	South African Association of Consulting Engineers
SAB	The South African Breweries Limited
SACI	South African Chemical Institute
SACPCMP	South African Council for the Project and Construction Management Profession
SACPVP	South African Council for the Property Valuation Profession
SACQSP	South African Council for the Quantity Surveying Profession
SADC	Southern African Development Community
SAFMA	South African Facilities Management Association
SAFOI	South African Fryer Oil Initiative
SAIP	South African Institute of Physics
SAISC	Southern African Institute of Steel Construction
SAMSI	Statistical and Applied Mathematical Sciences Institute

SANCIAHS	South African National Committee for the International Association of Hydrological Sciences	SEDA	Small Enterprise Development Agency	UNEP	United Nations Environment Programme
SANCU	South African National Consumer Union	SMME	Small, Medium and Micro Enterprises	UNESCO	United Nations Educational, Scientific and Cultural Organisation
SANPAD	South Africa-Netherlands Research Programme on Alternatives in Development	SRC	Student Representative Council	USA	United States of America
SAPOA	South African Property Owners' Association	SRL	Sustainable Rural Livelihood	USAID	United States Agency for International Development
SAPS	South African Police Services	SSAG	Society of South African Geographers	UTCHEM	University of Texas Chemical Compositional Simulator
SAQA	South African Qualifications Authority	T		UWC	University of the Western Cape
SASAS	South African Society for Animal Science	THRIP	South African National Research Foundation Thrust for Industry-Related Projects	W	
SASQUA	Southern African Society for Quaternary Research	TUE	Technical University Eindhoven	WARFSA	Water Research Fund of Southern Africa
SAVAH	South African Association of Visual Arts Historians	U		WATOC	World Association of Theoretically Orientated Chemists
SBE	Sustainable Built Environments	UCT	University of Cape Town	WFP	World Food Programme
		UFS	University of the Free State	WITS	University of the Witwatersrand
		UJ	University of Johannesburg	WRC	Water Research Commission
		UK	United Kingdom	WUA	Water Users' Association
		UN	United Nations		