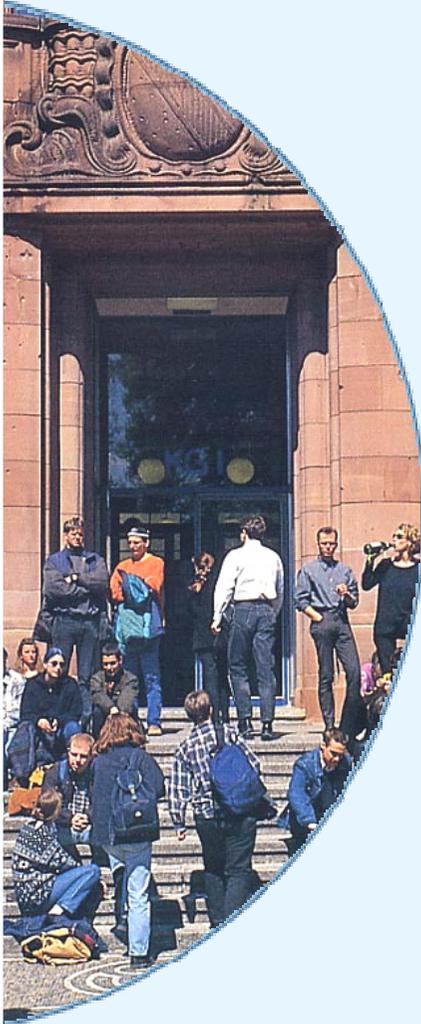




ALBERT-LUDWIGS-
UNIVERSITÄT FREIBURG

The Faculty of Forest and Environmental Sciences

Freiburg, Germany



The University

- founded in 1457
- 11 faculties
- 6 interdisciplinary research centres
- 65 subjects
- 20 000 students
- 'studium generale'
- diverse university sport facilities
- university cultural life (orchestra, choirs, film club etc.)



The Faculty

- 13 institutes
- 135 permanent staff
of whom 26 are full time professors
and 44 further scientists
- About 1300 undergraduate student
- 80 MSc students
- 250 Ph.D. students

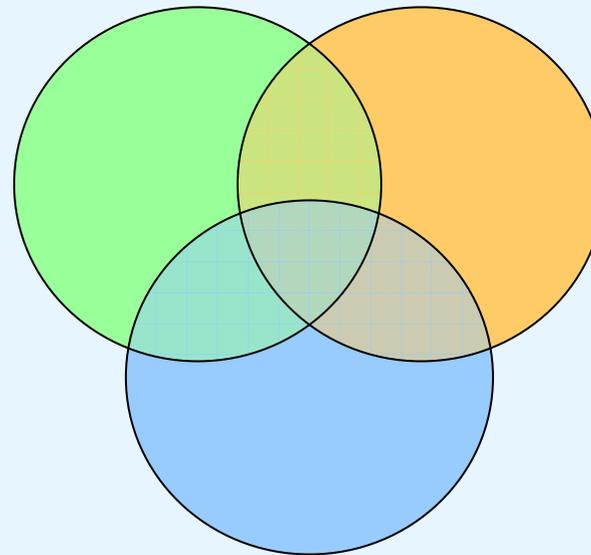




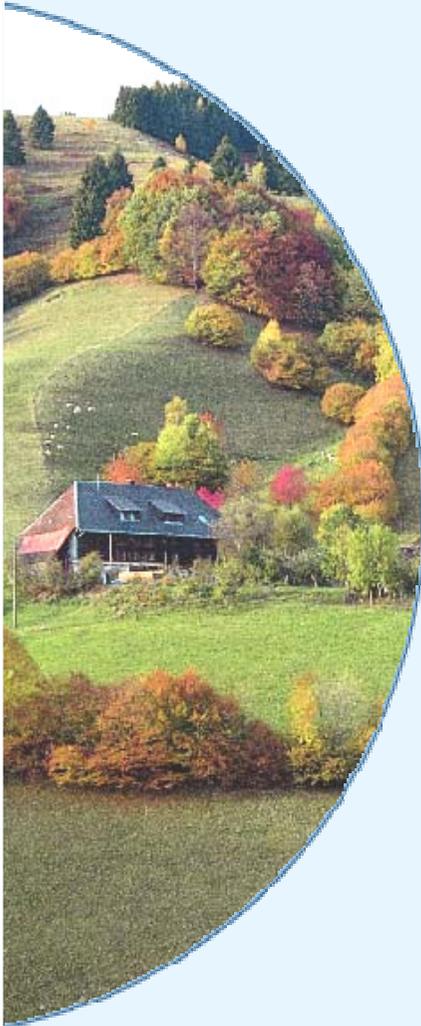
The Faculty's Subject Areas

Forest Sciences

Geography



Hydrology





Graduate Studies

Bachelor Programmes (since October 2005)

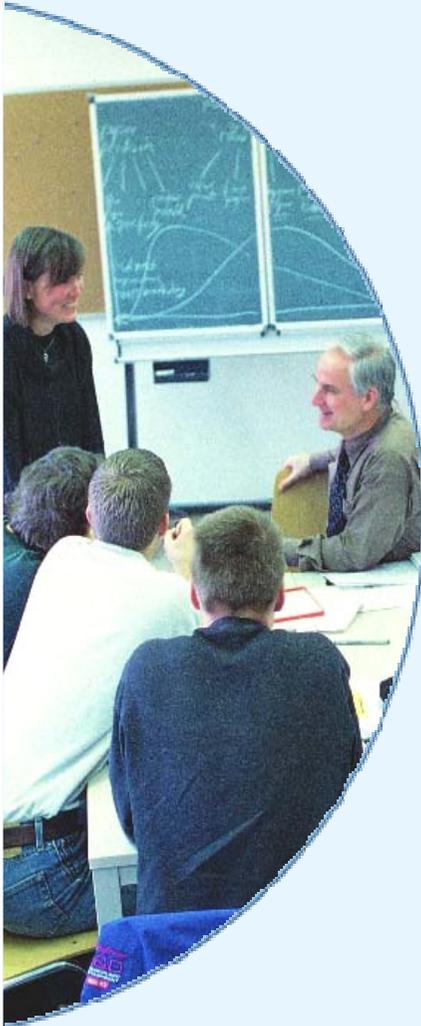
- B.Sc. Forestry and Environment
- B.Sc. Geography

Diploma Courses (have been replaced)

- Forest Sciences
- Hydrology

Teacher Training for High School

- Geography 360 students





BSc Programmes

Forestry and Environment

Geography

The B.Sc. programmes consist of

- Main subject
Forestry and Environment or
Geography
- Secondary subject
- Transferable job-oriented skills



B.Sc. Programmes (II)

Secondary subjects:

- Forestry and Environment
- Geography
- International Forestry
- Forestry and Wood Industry
- Landscape Development and Nature Protection
- Environmental Sciences
- Meteorology und Climatology



B.Sc. Programmes (III)

- Duration: 6 semester
- 180 ECTS
 - main subject: 120 ECTS
 - Secondary subject: 40 ECTS
 - Transferable skills: 20 ECTS
- Introductory Module (3 weeks)
- Internship (2 months)
- Thesis work (8 weeks)



Postgraduate Studies

Masters Programmes

- M.Sc. Environmental Governance
- M.Sc. Forest Ecology and Management
- M.Sc. Forstwissenschaft (2008)
- M.Sc. Geographie (2008)
- M.Sc. Hydrologie (2008)



Postgraduate Studies

Ph.D. Programmes

- International Ph.D. Programme
'Forestry in Transition' (2002-2006)
- DFG graduate college
'Formation and Development of Present-day Landscapes'



Postgraduate Studies: Future

Graduate School

“Environment and Development”

Subdivided into

5-6 Research Groups



M.Sc. Environmental Governance

M.Sc. Forest Ecology and Management



- language of instruction: English
- duration: 2 years
- 1st -3rd semester: taught modules (3 weeks each)
- 4th semester: Masters thesis
- 120 ECTS
- courses begin each October
- application deadline: 15 May
- 25 students per year



M.Sc. Environmental Governance (I)

'Environmental Governance' refers to the interrelations between

- **the market economy**
- **governments and**
- **civil society**

as crucial elements of sustainable development





M.Sc. Environmental Governance (II)

Students acquire knowledge, methods and skills in order

- **realise**
- **understand and**
- **manage**

the highly complex and dynamic interactions between ecosystems, economic sectors and societies.





M.Sc. Environmental Governance (III)

The programme focuses on

- the development of a sound **knowledge** basis of the most pressing **environmental issues**
- the discussion of different **analytical frameworks** from social, economic and political science perspectives
- the provision of **methodological knowledge** and skills for the context-sensitive design and management of environmental governance processes.





MSc Environmental Governance (IV)

4. Sem.	Master Thesis – 6 months					
3. Sem.	Student Organized Event	Research Skills	<i>Elective 3</i>	<i>Elective 4</i>	Case Study 2 Integrated System Design	
Internship – 7 weeks						
2. Sem.	<i>Elective 2</i>	Economics, Institutions & the Environment	Environ. Policy Analysis	Sociology & Psychology of Environ. Knowledge	Ecosystem Management	
1. Sem	Sustainability & Governance	Gobal Environ. Change	Global Societal Change	Managing human-environ. Interactions	<i>Elective 1</i>	Case Study 1 Regional Studies



M.Sc. Environmental Governance (IV)

Electives

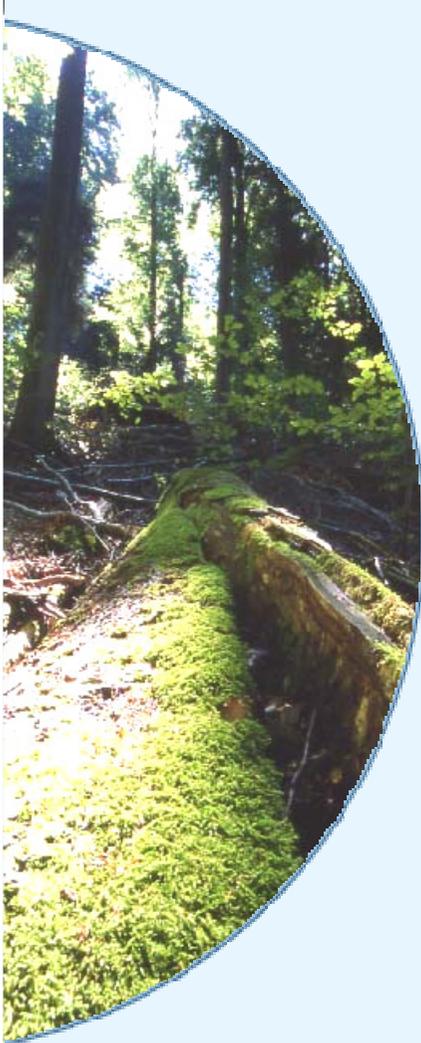
- Knowledge Management & Organizational Learning
- Environmental Law
- Environmental Ethics
- Technology Assessment and Sustainable Development
- Environmental Conflict Management
- Corporate Governance
- NGO 's and Environmental Governance
- and all electives from the MSc Forest Ecology and Management



MSc Environmental Governance (V)

Admission requirements

- B.Sc. or equivalent well above average in social sciences, economics, environmental sciences, forestry, agriculture, or related fields
- very good knowledge of English (TOEFL 600 paper based /250 computer based, IELTS band 6)
- tuition fees: 500 € per semester





MSc Forest Ecology and Management (I)

This course focuses on the
sustainable management
of forests and other natural resources.





MSc Forest Ecology and Management (II)

Based on a sound understanding of fundamental ecosystem characteristics and processes, students learn

- to assess
- to manage and
- to monitor

forests and other natural resources according to the principles of ecosystem management.

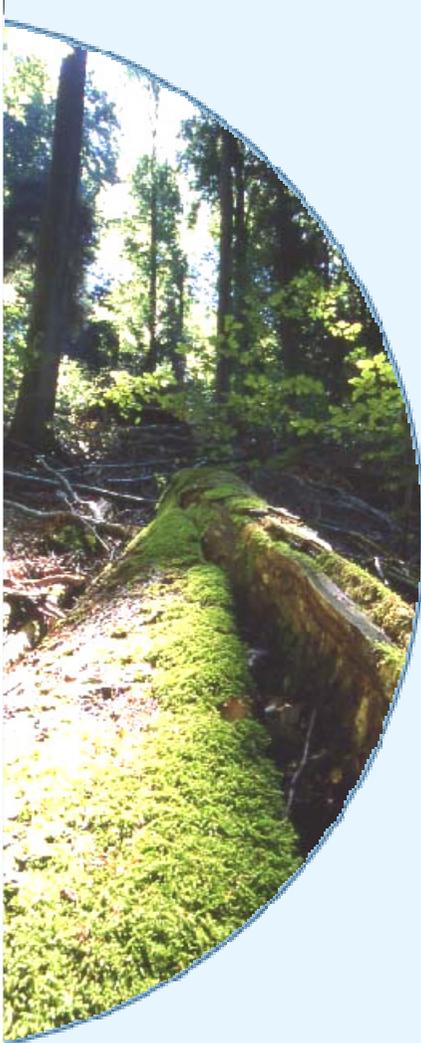




MSc Forest Ecology and Management (III)

The study programme comprises:

- an understanding and analysis of the direct and indirect **effects of mankind on forests** and other terrestrial ecosystems,
- an understanding of **ecological and environmental processes** at various levels: cells, individuals, populations, ecosystems, landscapes and global systems, and
- the provision of **methodological knowledge and skills** to design and evaluate management and accompanying research plans.





MSc Forest Ecology and Management (IV)

4. Sem.	Master Thesis – 6 months					
3. Sem.	Ecoinformatics & Environmental Monitoring	Natural Hazards & Risk Management	<i>Elective 4</i>	<i>Forest Resources & Wood Protection</i>	<i>Elective 5</i>	
Internship – 7 weeks						
2. Sem.	<i>Soil Ecology & Management</i>	Population & Community Ecology & Management	Elective 3	Methods in Ecosystem Analysis	Ecosystem Management	
1. Sem	Gobal Environmental Change	Tree Structure & Function	Managing human- environ. Interactio ns	<i>Elective 1</i>	Statistics & GIS	<i>Elective 2</i>



M.Sc. Forest Ecology and Management (V)

Electives

- Forests and Water
- Agro Forestry and Farm Forestry
- Forests and Climate Change
- Analysis and Management of Tree and Stand Growth
- Forest-Atmosphere Interactions
- Ecological Modelling
- Non Timber Forest Products and Bioresources
- Molecular Biology and Biotechnology
- Conservation Biology
- Forest and Resource Inventory
- Plantation Forestry
- Selected Topics

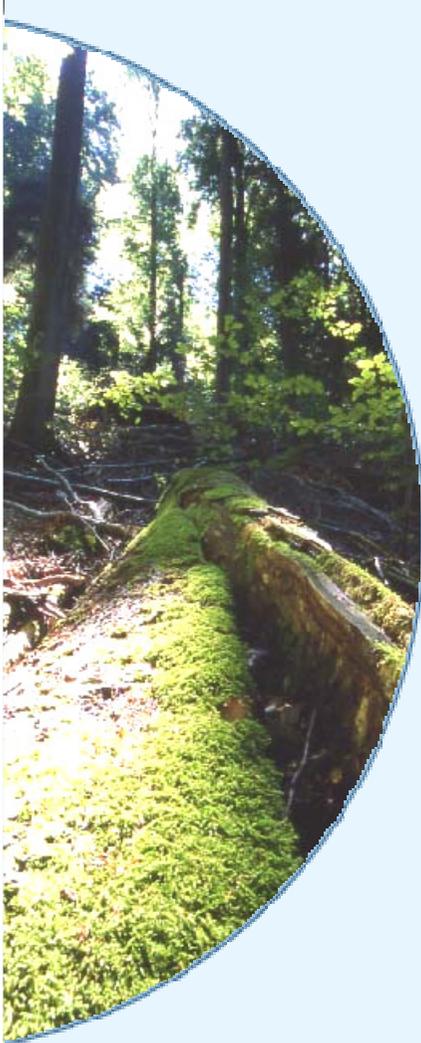
and all electives from the MSc Environmental Governance



MSc Forest Ecology and Management (IV)

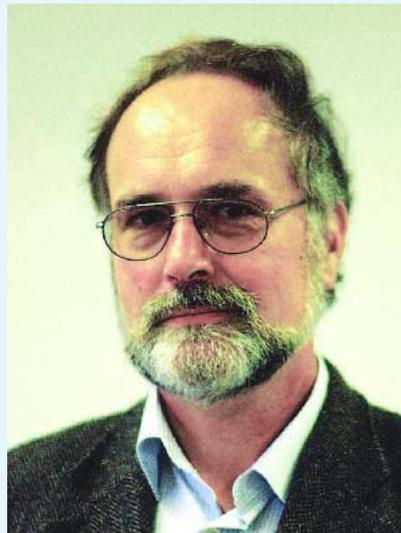
Admission requirements

- B.Sc. or equivalent well above average in forestry, environmental sciences, agriculture, or related fields,
- very good knowledge of English (TOEFL 600 paper based /250 computer based, IELTS band 6)
- tuition fees: 500 € per semester (2007)

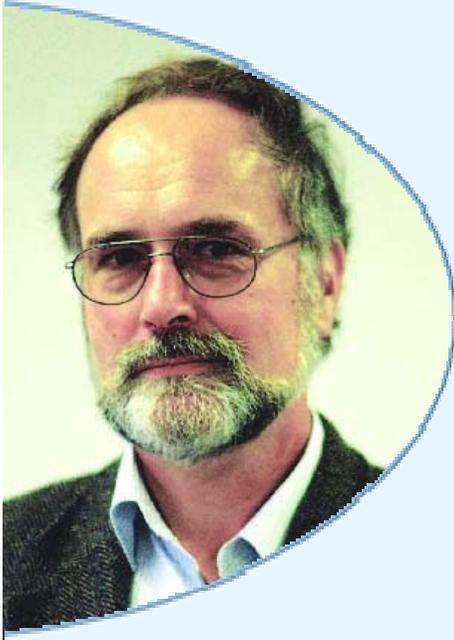




Institute of Soil Science and Forest Nutrition



Prof. Dr.
Ernst Hildebrand
Head of Institute



Prof. Dr.
Ernst Hildebrand
Head of Institute

Research Priorities

- impact assessment of technology on forest soils :
depositions and mechanical pressures
caused by forest management
- soil erosion and forestry in the tropics and in
moderate climate regions
- microcosm forest soils:
structures, processes, functions
- soils as regulators of mineral cycles,
forest nutrition and water quality
- gas balance of forest soils



Institute of Forest Botany and Tree Physiology



Prof. Dr.
Siegfried Fink
Professor of
Forest Botany



Prof. Dr.
Heinz Rennenberg
Professor of
Tree Physiology



Prof. Dr.
Siegfried Fink

Professor of
Forest Botany

Research Priorities

- hormonal and molecular aspects of pattern development in wood
- changes in wood structure due to decay fungi
- fungal infections of tree roots
- urban trees / arboriculture
- reactions of trees to abiotic stresses



Prof. Dr.
Heinz Rennenberg
Professor of
Tree Physiology

Research Priorities

- biosphere / atmosphere interactions
- eco-physiology of trees, forest ecosystems and wetlands
- molecular eco-physiology of nitrogen and sulphur metabolism
- stress physiology
- organismic interactions
- phytoremediation of soils



Institute of Forest Zoology

FZI



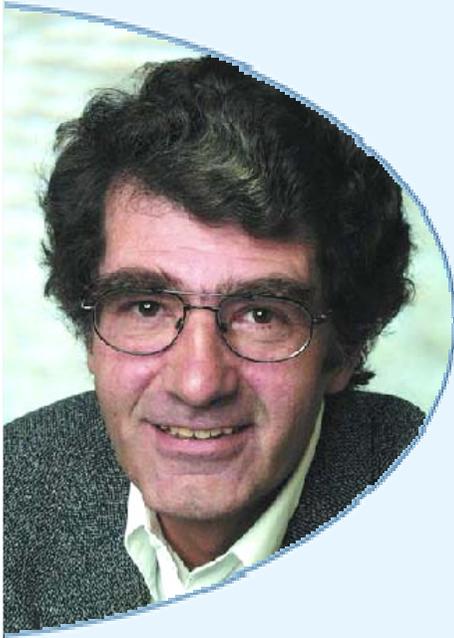
Prof. Dr.
Michael Boppré
Head of Institute

Department of
Forest Zoology
and Entomology



Prof. Dr.
Ilse Storch

Department of
Wildlife Ecology and
Management



Prof. Dr.
Michael Boppré
Head of Institute

Department of
Forest Zoology
and Entomology

Research Priorities

- chemoecology
- mechanisms of communication in insects (especially pheromone biology)
- animal-plant relationships
- alien species in communities
- differences between populations of a given species ('ecospecies')
- intraspecific variation of chemicals for protection and communication
- integrated forest pest management



Prof. Dr.
Ilse Storch

Department of
Wildlife Ecology and
Management

Research Priorities

- wildlife-habitat relationships
- landscape patterns and spatial structure of wildlife populations
- faunistic change and biodiversity
- modelling of population processes
- molecular population ecology
- conservation biology
- human dimensions in wildlife conservation



Prof. Dr.
Ilse Storch

Department of
Wildlife Ecology and
Management

Research Priorities

- wildlife-habitat relationships
- landscape patterns and spatial structure of wildlife populations
- faunistic change and biodiversity
- modelling of population processes
- molecular population ecology
- conservation biology
- human dimensions in wildlife conservation



Institute of Silviculture



Prof. Dr.
Jürgen Bauhus
Head of Institute

Department of
Silviculture



Prof. Dr.
Albert Reif

Department of
Vegetation Science



Prof. Dr.
Jürgen Bauhus
Head of Institute
Department of Silviculture

Research Priorities

- silvicultural systems and sustainability indicators
- carbon and nutrient cycling in forest ecosystems - global change
- structure and dynamics of forest ecosystems
- plant-Soil interactions



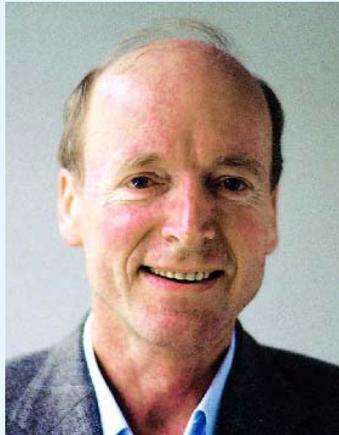
Prof. Dr.
Albert Reif
Department of
Vegetation Science

Research Priorities

- forest vegetation and sites of the temperate climate zone
- traditional cultural landscapes in Greece and Romania
- commercial and natural forests in the tropics and subtropics
- hedges and forest edges

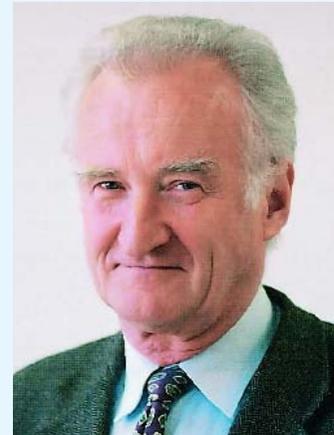


Institute of Forest Growth



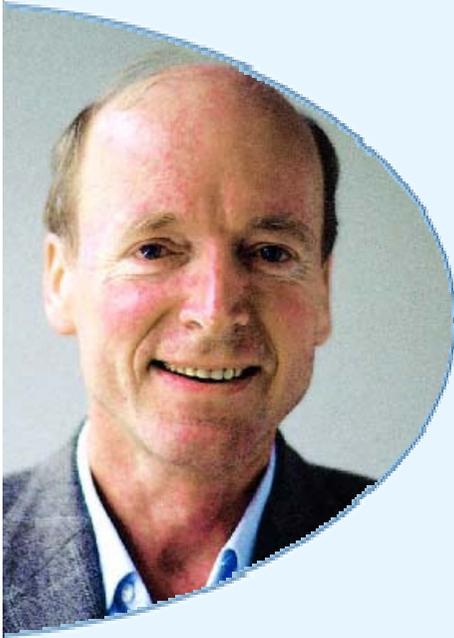
Prof. Dr.
Heinrich Spiecker
Head of Institute

Department of
Forest Growth



Prof. Dr. Dr. h.c.
Dieter R. Pelz

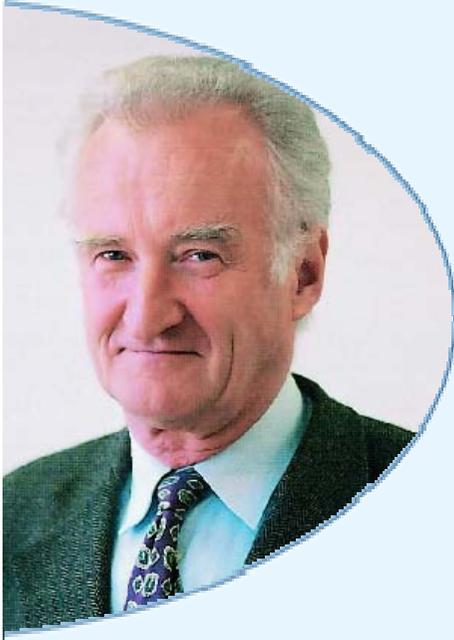
Department of
Forest Biometrics



Research Priorities

- ecological principles of forest growth
- management of forest growth
- methods of forest growth research

Prof. Dr.
Heinrich Spiecker
Head of Institute
Department of Forest Growth



Research Priorities

- biometrics
- forest mensuration and forest inventory
- surveying
- forest information systems

Prof. Dr. Dr. h.c.
Dieter R. Pelz

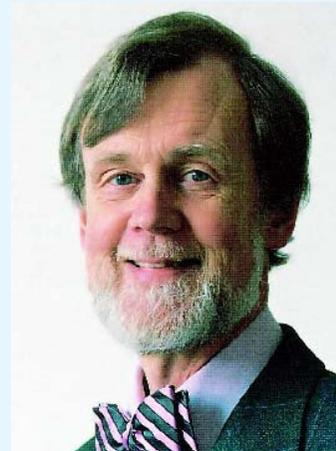
Department of Forest
Biometrics



Institute of Forest Utilisation and Work Science



Prof. Dr. Dr. h.c.
Gero Becker
Head of Institute
Department of
Forest Utilisation



Prof. Dr.
Siegfried Lewark
Department of Forest
Work Science



Prof. Dr. Dr. h.c.
Gero Becker

Head of Institute

Department of Forest
Utilisation

Research Priorities

- wood science
wood physics, wood technology, wood utilisation and industrial wood processing, wood products
- forest technology
- forest machinery, wood harvesting systems, logistics
- bioenergy
- opening up of forests, forest road construction and wood transport



Research Priorities

- ergonomics and safety at work
- labour organisation, team work
- work design
- remuneration systems
- forestry education and further education
- gender studies with a focus on rural areas



Prof. Dr.
Siegfried Lewark
Department of Forest Work
Science



Institute of Forest Economics



Prof. Dr.
Gerhard Oesten
Head of Institute

Department of
Forest Economics
and Forest
Management
Planning



Prof. Dr.
Barbara Koch

Department of
Remote Sensing
and Landscape
Information Systems



Prof. Dr.
Gerhard Oesten
Head of Institute

Department of Forest
Economics and Forest
Management Planning

Research Priorities

- forest enterprise and society
- sustainable management of enterprises
- institutional change & resource use
- socio-economic aspects of international forestry



Prof. Dr.
Barbara Koch

Department of Remote
Sensing
and Landscape Information
Systems

Research Priorities

- methods of condition assessment, observation, visualisation and analysis of forests and landscapes
- examining the effects of new technologies on planning processes
- development of new multimedia technologies to be used in forestry
- GIS development



Institute of Forest and Environmental Policy



Prof. Dr.
Karl-Reinhard Volz
Head of Institute
Department of
Forest Policy



Prof. Dr.
Heiner Schanz
Department of
Markets and
Marketing



Prof. Dr. Dr. h.c.
Hans Essmann
Department of Land
Use Policy



HD Dr. habil. Dr.
Uwe E. Schmidt
Department of
Forest History



Research Priorities



Prof. Dr.
Karl-Reinhard Volz
Head of Institute

Department of Forest Policy

- nominal and functional aspects of forest policy on an international scale
- regulatory policy in forestry
- policy analyses related to forest owners
- sociology and social psychology of political actors in the field of forestry and environmental issues
- forests and the public (incl. forest pedagogy)
- environmental policy analyses



Prof. Dr.
Heiner Schanz

Department of Markets and
Marketing



Research Priorities

- markets and marketing of the forest and timber industry
- international trade of forest products, services, and rights
- socio-economic aspects of international forestry (focus on tropics and sub-tropics)
- resource governance



Research Priorities

- criteria and indicators for sustainable land use management
- competing forms of land use and political conflicts
- comparative environmental policy



Prof. Dr. Dr. h.c.
Hans Essmann

Department of Land Use
Policy



Research Priorities

- historical development of attitudes towards nature and forests
- analyses of the economic and social history of forest utilisation relevant to present times
- historical and social changes with regard to forest related jobs



HD Dr. habil. Dr.
Uwe E. Schmidt

Department of
Forest History



Institute of Landscape Management



Prof. Dr.
Werner Konold
Head of Institute



Research Priorities

- landscape development and nature protection
- artificial or extremely altered waterways and their ecological value
- recultivation of mining areas and dumps



Prof. Dr.
Werner Konold
Head of Institute



Institute of Meteorology



Prof. Dr.
Helmut Mayer
Head of Institute



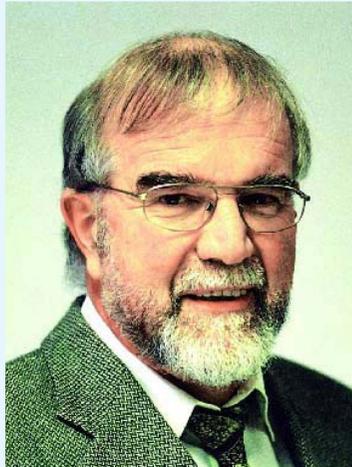
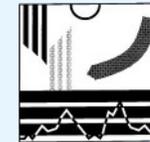
Prof. Dr.
Helmut Mayer
Head of Institute

Research Priorities

- energy, water and mineral balances of forests
- meteorological conditions leading to storm damage in forests
- characteristics of the atmospheric boundary layer
- phenomena and processes of urban climate
- assessment of climate and air quality
- influence of climate on tourism



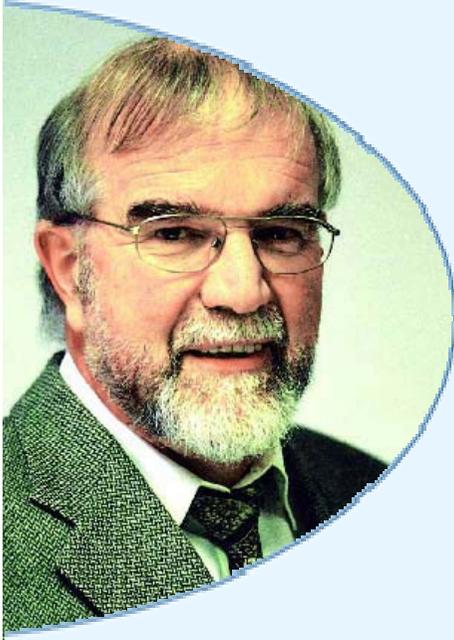
Institute of Hydrology



Prof. Dr.
Christian
Leibundgut
Head of Institute



Prof. Dr.
Heidulf Müller



Prof. Dr.
Christian Leibundgut
Head of Institute

Research Priorities

- hydrology of catchment areas
(formation of runoff/modelling/tracer hydrology)
- water balance and water resources
- hydrological extremes
- hydrology of arid and semi-arid regions
- integrated water protection
- hydrological maps / atlases
- hydrology history



Prof. Dr.
Heidulf Müller

Research Priorities

- mineral balance and mineral transport
- water assessment
- water restoration



Institute of Physical Geography



Prof. Dr.
Rüdiger Glaser
Head of Institute



Prof. Dr.
Rainer Glawion



Prof. Dr.
Rüdiger Mäckel



Prof. Dr.
Bernhard Metz



Research Priorities



- climate research
- geoinformatics and remote sensing
- the polar regions
- multimedia teaching methods

Prof. Dr.
Rüdiger Glaser
Head of Institute



Prof. Dr.
Rainer Glawion

Research Priorities

- biogeography and landscape ecology
- methods of environmental assessment
- interpretation of landscapes
- moist forest ecosystems in the Pacific region of North America
- vegetation degradation and soil erosion in Iceland



Prof. Dr.
Rüdiger Mäckel

Research Priorities

- applied geography in the tropics and subtropics
- geomorphology and landscape history
- comparative research of low mountain ranges in Central Europe



Prof. Dr.
Bernhard Metz

Research Priorities

- general geomorphology
- geomorphology of high mountain ranges and the polar regions
- karst morphology
- Humans and environment in ecologically vulnerable areas
- regional geography of English speaking countries



Institute of Cultural Geography



Prof. Dr.
Thomas Krings
Head of Institute



Prof. Dr.
Jörg Stadelbauer
Head of institute



Research Priorities

- third world geography and development studies
- political Ecology
- rural Development in the West African Sahel
- environmental Change in South-East Asia



Prof. Dr.
Thomas Krings
Head of Institute



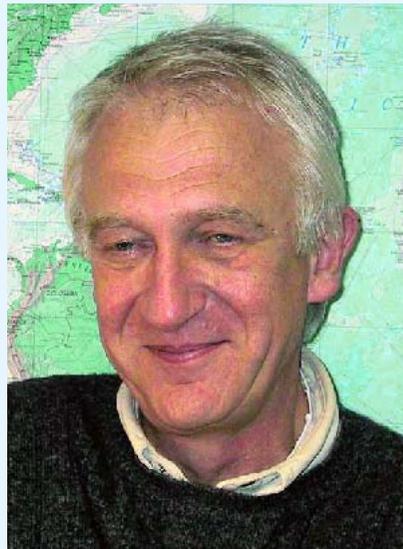
Prof. Dr.
Jörg Stadelbauer
Head of Institute

Research Priorities

- transformation and integration studies, especially states formerly part of the Soviet Union
- regional and cultural landscape research in south-western Germany and neighbouring areas
- political geography

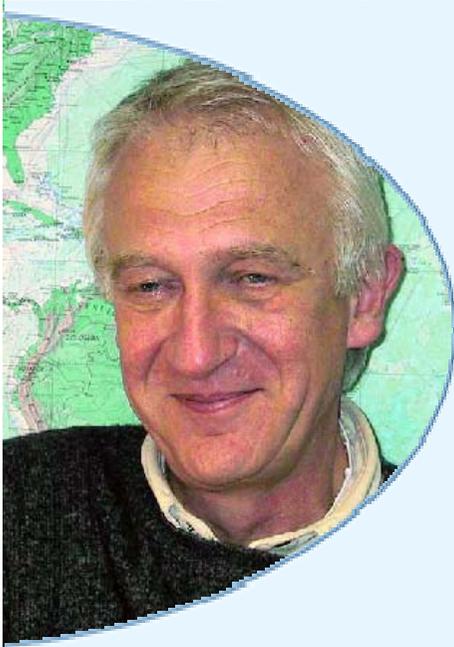


MPI of Chemistry, Department of
Biochemistry



Prof. Dr.
Johannes Goldammer

Working group on Fire Ecology
Global Fire Monitoring Center
(GFMC)



Prof. Dr.
Johann G. Goldammer
Working group on Fire
Ecology
Global Fire Monitoring
Center (GFMC)

Research Priorities

- global fire monitoring
- fire ecology
- application of prescribed burning in forestry, nature protection and landscape management
- effects of vegetation fires on the biosphere and atmosphere
- national and regional strategies for fire management
- implementation strategies at international level



THANK YOU FOR YOUR ATTENTION