NAME:	**Folke Gunther**
DATE OF BIRTH:	July 10, 1946
NATIONALITY:	Swedish
SHORT BIOGRAPHY:	Folke Günther, M.Sc., has a backgrond as field biologist and farmer, as well as his university career. He has worked eight years as a lecturer in Human Ecology at Lund University and is a Ph.D. student at Dept. of Systems Ecology, Stockholm University. The title of the thesis is 'Ecological Adaptation of Human Settlements'. One of the conclusions from his work is that ecological adaptation is a good way to attain sustainability, and that such an adaptation among other things involve a geographical and functional integration between settlements and agriculture for recycling of nutrients and diminishing industrial energy dependence. Such an integration can be attained also in urban sites by a progressive change of the urban borders to an undulating form penetrating the surrounding agricultural land, *ruralisation*.
EDUCATION:	Student graduation 1967
	Basic university education 1968-1980 (+1988)
	Courses in computer science 1972-73
	Basic agricultural education 1976
	B.Sc in Zoology, Chemistry, (Stockholm University), Environmental protection (Human Ecology and Natural Resource Management), Lund university, Limnology at Uppsala University, 1989
	M.Sc in Systems Ecology, Stockholm University, 'Self-organisation in systems far from thermodynamic equilibrium: Some clues to the structure and function of biological systems', 1994
	Ph.D student 'Ecological Adaptation of Human Settlements' at Stockholm University, Systems Ecology, Natural Resource Management. Dissertation planned 2003.
OTHER TRAINING:	Agricultural training, "Swedish agriculturist licence"
	Good and thorough computer experience.
	Thorough knowledge in ornitology, botany, medicine and other bio Agricultural training, "Swedish agriculturist licence"
	Good and thorough computer experience
	Thorough knowledge in ornitology, botany, medicine and other biological sciences. (Field biologist since 1957)
	Good understanding in far-from-equilibrium physics aquired from PhD training
	Permaculture gardening knowledge and experience
LANGUAGES:	Swedish: Mother tongue. Expression expertise enhanced through translation of several books
	English: Fluent

	Some capacity: German, French
	Some experience of: Finnish, Spanish, Afrikaans
COUNTRIES OF WORK:	Vast international scientific network from visits and colleagues in Europe, US, Canada, Japan and Russia.
	Experience from South Africa and Estonia
KEY QUALIFICATIONS	As a Researcher/ Consultant in the field of agriculture - settlement integration, I am a specialist in applying ecosystem principles in settlement structures.
	In my most recent consultancies, I have worked closely with municipalities and entrepreneurs in finding environmentally sustainable, economically viable and culturally acceptable solutions to wet and dry waste management, water conservation, settlement structures and nutrient cycling.
	I am an oustanding pedagogist in the field of describing ecosystem principles and societal structures related to ecology
	I am developing methods for biological water purification in outdoor and indoor system, using permacultural methods.
	Because of my experience in differnt fields and my creativity, I am good at finding new ideas and viewpoints
ACADEMIC CAREER	Fil mag. (B.Sc.) in Chemistry, Zoology (Stockholm), Limnology (Uppsala) and Environmental protection Science (IMES, Lund).
	Fil. Lic. (B.Sc) in Systems Ecology, Stockholm. Currently Ph.D. student at Department of Systems Ecology (see below), Stockholm.
	Lecturer at Div. of Human Ecology, Lund University (se below).
	A list of written articles and reports can be found at http://www.holon.se/folke/written/Eng/writeng.shtm
PEDAGOGICAL EXPERIENCE	High grade elementary school: (Stockholm and Karlskoga, 1969 - 1973)
	Gymnasial schools: (Stockholm 1969 - 1971, Mora 1975 - 1980)
	Universities: (Stockholm 1991 - 1992, Lund 1994 - 2002)
	Regular (2-3 times a month) and highly estimated lecturer at municipalities, associations, high schools, universities and business
OTHER SKILLS	Experience in field biology since 1957
	Ornithologist (320 species in Sweden)
	Thorough knowledge in (North European) botany
	Well experienced in gardening practice/methods and botany of garden plants
	Ecological engineering, esp. biologically based water purification
	Experience in translation (English -Swedish) 21 books
	Agricultural expertise (10 year practice).
COMPUTER SCIENCE and IT	Working with computers since 1988 (TRASK at Dept. of Physics, SU). Learning Fortran III and Basic IV In The 70-Ies.
	Active participant in the Swedish KOM And COM networks during early 80-ies.
	Experience of computing in the DOS, Windows and LINUX environments.

Experienced user of the Microsoft Office suite and several drawing programs as Corel Draw, PhotoShop.

Good experience in graphic design.

Using Microsoft Excel to construct large spreadsheets.
Webpage construction using Dreamweaver or direct CSS

Using Linux daily

Daily user of Netscape Communicator, IE and other communication programmes, as Galeon and direct FTP.

Constructing and teaching distance learning courses at Div. of Human Ecology, LU.

EMPLOYMENT RECORD

From 1994 to 2002

EMPLOYER: Lund Univeristy, Division of Human Ecology

POSITION HELD AND DESCRIPTION OF DUTIES: **University Lecturer/ Researcher**

Examples of work performed:

Courses in:

- Physical and Ecological Basis for Human Maintenance
- Ecological Economics
- Aspects on Sustainable Development
- Research training

1998-2000, research fellow at ”Östarpsprojektet” (System structure of pre-industrial agriculture)

From 1995 to Present

EMPLOYER: Skanska AB

POSITION HELD AND DESCRIPTION OF DUTIES: **Consultant**

Between 1995-1997, co-operation with SKANSKA AB in **a ”wetpark” project** at the Teknicum building, Kalmar högskola, in the city of Kalmar. The grey and rain water from a high school building was collected and purified to drinking water quality by means of a ”wetpark” system. The house was thus converted to a net exporter of water.
The construction and sizing of the system was developed as a result of theories created from the studies of the water purification processes and nutrient dynamics in riparian ecotones. In cooperation with the engineers and landscape architects employed by Skanska AB, a park system was developed that, beside its landscape enhancing effects (the 'park' part) also catches the grey and rain water from the house and purifies it to drinking water quality. A prerequisite for this is the use of source-separating toilet systems in the building. The water necessary to maintain the needs for this house is thus diminished by about 200%. (Rain water 700 m^3, purified and exported to other houses, grey water 400 m^3 recycled, drinking water imported: about 100 m^3)

A similar project was developed in a housing project outside the city of Gävle, where the availability of water was very low, but has still not been realised due to the lack of means (for house-building, the wetpark system

	is cheaper than the ordinary waste water management system).
From 1998	
EMPLOYER	Kalmar Länssjukhus / Kalmar kommun
POSITION HELD AND DESCRIPTION OF DUTIES	**Consultant** **Project GUDMUNDSPARKEN, Länssjukhuset Kalma**r The project, sponsored by the Swedish 'Kretsloppsmiljarderna' investment and Kalmar municipality, aims at a pond-based purification plant for storm water from the hospital area. The aim is to purify the water to a degree that transform it to a possible source of extra water for use in the hospital area. Folke Günthers duties is to design and calculate the areas used and to propose an accurate composition of the plant society that perform the water purification. The project is finished and the design can be viewed at http://www.holon.se/folke/projects/Eng/gudmeng.shtml
From 1996 to Present	
EMPLOYER	Lund municipality, S. Sweden
POSITION HELD AND DESCRIPTION OF DUTIES	**Consultant, Leader of an Agenda 21 project** In the Agenda 21 project, the involvement of citizens was a prerequisite. A group of interested citizens was raised to compose an Agenda 21 document concentrating on the problems associated with the interactions between the town and its surrounding agricultural landscape. Initially, the planning goal was investigated by a 'guided imagery' method leading to an understanding of basic human needs attained in a future 'wished' settlement . This 'wished settlement' was thoroughly compared with recent knowledge of a 'possible settlement' regarding energy availability, water management, nutrient recycling, economical interactions and similar aspect. After that, the two versions were compared to attain a 'possible wished settlement'. Important issues in this settlement was outlined in a consensus document, which later was includes as a part of the Lund Agenda 21 document. **Co-operates with the city-planners of Lund** regarding the ecological adaptation of a planned extension of the city of Lund. In this project, the aim is to 'translate' the issues of the Agenda 21 document into the actual planning of an extension of the city of Lund into the nearby landscape. This project was started in late 1997 and finished in 1999.
From 1991 to Present	
PH.D. Student	Stockholm University, Division of Natural Resource Management
POSITION HELD AND DESCRIPTION OF DUTIES	**PhD Student** Overall Title Of The Work: Ecological Adaptation of Human Settlements The work is set forth with a work aiming at a general understanding of the structure of living systems, especially at the ecosystem level and the development of nutrient recycling systems. It is proceeded with an investigation of the general structure of phosphorus fluxes in developed and urbanised countries, in which counterintuitive anomalies are studied, leading to 'time-bombs' of

	pollution and leakage. A later part discusses the structure, function and vulnerability of advanced agricultural systems. The last part ties the earlier parts together with a scenario study of economic and other effects of the introduction of an 'ecomimetic' societal structure with less vulnerability, advanced cycling of nutrients and low vulnerability to increased energy prices. Ph.D. dissertation planned to 2002 A post-doctoral study will evaluate the possibilities to and methods for the introduction of the same changes in settlement planning as those that are known to happen in maturing ecosystems.
From 1991 to 1996	
EMPLOYER	Dept. of Systems Ecology, Stockholm University, and Dept. of Limnology, Uppsala University
POSITION HELD AND DESCRIPTIONS OF DUTY	**Project Assistant** Assistant at the FRN Project (Swedish Council for Planning and Coordination of Research) in the project ”Ecosystem Integration of Human Resource Flows” A research project studying the thermodynamical basis for self-organising, living, systems, leading to the development of a theory of understanding living systems as a continuous series of nested systems, and a basic understanding of the development of nutrient cycling in maturing ecological systems.
From 1993 to 1997	
EMPLOYER	Dept. of Systems Ecology, Stockholm University, and Dept. of Limnology, Uppsala University
POSITION HELD AND DESCRIPTIONS OF DUTY	**Project Assistant** Assistant at AFR (Swedish Council for Waste Management and Research) in the project ”Societal Structure and Phosphorus Flux”. The principles of phosphorus flux in the Swedish society was evaluated, leading to a wider understanding of the problems of pollution from phosphorus effluents as an effect of linear flows. The work of Folke Günther in this project contained the collection of data, computer simulations and the construction of models necessary to understand time-dependent leakage from dynamic storage. The know-ledge produced is vital for the understanding of the creation of sustainable settlement structures.
From 1992 to 1993	
EMPLOYER	The Institute of Future Studies
POSITION HELD AND DESCRIPTION OF DUTIES	**Assistant** Assistant in the project ”Biology and Settlement” As a collaborator in the project, the aim of which was to produce a report in the form of a book, Folke Günther produced an article 'Systems Ecology and Societal planning', in which he evaluated the possibilities of introducing ecosystem principles in societal planning.
From 1991 to 1992	

EMPLOYER	Stockholm University, Dept. of Systems Ecology
POSITION HELD AND DESCRIPTION OF DUTIES	**Assistant (20%)** During this time Folke Günther assisted as a Ph.D. course leader (Eco-development), in the organisation of and lecturer in national (Tillväxt?) and international conferences (Natural Capital: A Prerequisite for Sustainability, second meeting of ISEE, the International Society for Ecological Economics)
From/ To 1992	
EMPLOYER	Lund University, Dept. of Environment- and Energy Systems
POSITION HELD AND DESCRIPTION OF DUTIES	**Supervisor Of Students** Supervised Students In ”Wastewater Procedures With Ecological Methods”, LTH, Lund. Different Supervision Projects At Div. Of Human Ecology, Lund University.
From/ To 1989	
EMPLOYER	Lund Technical University, Department of Urban Planning
POSITION HELD AND DESCRIPTIONS OF DUTY	**Lecturer (part time)** Lectured on Ecology in Urban Planning on a Ph.D. course.
From 1974 to 1986	
EMPLOYER	Schools and colleges in Stockholm, Karlskoga, Mora and Halmstad
POSITION HELD AND DESCRIPTION OF DUTIES	**Teacher** Part-time teaching in biology, physics and chemistry in lower (classes 7-9) and (mostly) higher (classes 10-14) schools.
From 1974 to 1996	
EMPLOYER	Various publishers
POSITION HELD AND DESCRIPTION OF DUTIES	**Translator** As a part-time occupation during this time, about 25 books (in botany, zoology, gardening, environment, survival, and the like) were translated and rewieved.
From 1974 to 1986	
EMPLOYER	Self-employed
POSITION HELD AND DESCRIPTION OF DUTIES	**Farmer** Worked from 1974-1981 as a small scale farmer (less than 10 cows, 20 hectares) aiming at self-sufficiency. 1982-86 in a larger scale (40 cows, 50 hectares), dairy production, pigs.
1998 March – April	
EMPLOYER	Hifab International AB, Stockholm
POSITION HELD AND DESCRIPTION OF DUTIES	**Advisor** **Innovative technology** With special reference to Urban Infrastructure and Innovative Technology in the city of Kimberley, South Africa, in the SIDA/Hifab project *Comprehensive Urban Plan Kimberley and Port Elisabeth*. Work with water resource management and proposal of water saving devices

and methods.

A report from this work can be found at
http://www.holon.se/folke/written/stuff/kimb/report2.pdf

2000 June –

EMPLOYER: Self-employed

POSITION HELD AND DESCRIPTION OF DUTIES: **Director**

HOLON Ecosystem Consultant

The main scope of the firm is advice and education in ecologically benign techniques regarding human settlements.

On the record is

- Development and design of the biological part of the ‘Aniara’ exhibition on Royal Museum of Natural History, Stockholm. The exhibition starts in November 2000, and is planned to be semi-permanent.
- Planning and development for the ‘Ecotopia’, education and congress site in Aneby, Sweden
- Evaluation of the project ‘Kretsloppsön Ven’, Landskrona municipality. Landskrona Municipality and Swedish National Department for the Environment finance the project.
- Lectures for high schools, municipalities and associations.
- Development of biological water purification projects
- Consultant at the ‘Hållbara Robertsfors’ project 2002-2004 and possible prolonging.
- Developing a sustainability project at Hampnäs folk high-school, Örnsköldsvik. Basic project application spring 2003. Later application to Object 1, European Union, together with an Irish project. (FEASTA).