



bulletin

International Association for Landscape Ecology

CHANGES IN IALE-BULLETIN FROM 1992

With the next Bulletin we will start the 10th volume. Some important changes will take place:

- It will be issued 4 times yearly with prominent dead-lines
- It will be printed centrally and distributed directly to all members of IALE-international, unless a clear arrangement on distribution without delay through the regional organizations are obtained
- The layout will change to normally 4 pages of A4-format, printed on A3-paper, making it possible to give a reasonable amount of information within the low-cost limits of letters (20 g).
- The diary will be compiled more systematic than till now
- We will try to give more systematic information on new books relevant for landscape ecology.

As a member service a list of content for the most important articles in the Bulletin Vol. 1 to 9 is printed on page 12 in this Bulletin.

Old issues of the Bulletin can be ordered free from the Bulletin editor as long as they are in stock.

MEMBERSHIP RENEWAL AND FEE FOR 1992

Membership renewal should be send to IALE general Secretary Almo Farina. Membership fee should be paid to the treasure James Thorne. For practical reasons, members in America, Asia and Australia should send the fee to James Thorne, USA, members in Europe, Middle East and Africa to Almo Farina, Italy.

The fee is 75 US\$, including subscription on IALE Bulletin and Landscape Ecology for 1992, 10 US\$ for membership fee with subscription only on IALE Bulletin.

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Deadlines 1992:

- no. 1: February 1st
- no. 2: May 15th
- no. 3: September 15th
- no. 4: December 1st

ENVIRONMENTAL POLICY AND LANDSCAPE ECOLOGY IN THE SLOVAK REPUBLIC

Ladislav Miklos.

Slovak Commission of Environment

Deputy Minister

1. Institutions of environmental control in CSFR

The environmental condition in the CSFR and the activity of environmentalists have been one of the main driving forces of the "gentle revolution" in November 1989. Many important personalities of the Revolution have come from environmentalist

circles. After the Revolution, we started our new struggle against the environmental degradation with a great ardour. Almost all political parties have emphasized improvement of the environment as one of the most important goals of their program.

The Ministry of Environment of the Czech Republic (MZE CR) was established on January 1, 1990; the Slovak Commission of Environment (SKZE) in the Slovak Republic was established on April 1, 1990 and the Federal Committee of Environment (FVE) was established on July 19, 1990. So control of the environmental care reached a qualitatively new level.

According to the distribution of competence between the three top organs, the main task of the FVE is the coordination of tasks concerning by

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their consequences both Republics or concerning the interests of neighbouring states; international agreements, the proposal of the ecological policy of the state, the basic legislative amendments in essential matters of the environment, the state supervision of nuclear security.

In addition to conceptual tasks, the MZP CR and SKZP also have direct management functions - they are the top organ of the state administration in the following fields:

- territory planning and building order
- nature protection
- water quantity and quality protection and their rational exploitation
- atmosphere protection
- solid communal wastes management

We assume that the competence of the Republic ministries will be extended by protection of further natural resources (soil, forests).

The state administration is being performed by the MZP CR in the regions through particular departments within the framework of district offices of the general state administration. In the Slovak Republic, there is a special independent state administration for the environment - district offices of environment and local offices of environment.

The top state expert supervision is being performed by the Czech technical inspection of atmosphere protection, the Czech water-economical inspection and the Czech hydrometeorological institute in the Czech Republic, and by the Slovak inspection of the environment in the Slovak Republic.

The institutions having to maintain a good environment have inherited a very difficult task. The environmental condition in the CSFR, according to the load per 1 inhabitant as well as per area-unit, is among the worst in Europe and in the world. The ministries have elaborated the principles of their ecological policy as well as programs for realization of the ecological policy. The programs for realization of the ecological policy show immense difficulties and great financial requirements for the whole national economy; at the same time they pull down the illusions about a quick improvement of the environmental condition. This fact disappoints a vast majority of the public, especially the voluntary nature protectionists and the environmentalists, and affects the general political atmosphere negatively.

2. Ecological policy - the guide of environment management.

The ecological policy can be seen in its simplest and at the same time most complex form as a

guidance of society to maintain the conditions of life on earth. The activities defined as environmental protection and creation produce no material outputs which "protect" and "create" the environment. Such outputs are primarily the result of economical activities which in fact are the causative roots of ecological problems. Hence, environmental protection and creation can only be implemented through the exertion of influence upon economic activities preventing them to be the cause of environmental problems.

This process is called the ecologization (comp. mechanization, chemization, automatization etc.) of the social development, i.e. introduction of ecological principles into all areas of social activity. Therefore for the ecological policy to be successful, it has to be accepted by the entire society, including all of its branches; otherwise no success can be expected. It is the cross-sectoriality of ecological policy. From the systemic viewpoint it can be said that ecological policy must guide the level of ecological awareness of society, enforce ecological ideas in legislative and economical management instruments of society, in the strategy of space organisation and land use, as well as in the technological activities. All these basic elements of ecological policy must form a complex system.

Hence a successful ecological policy must affect the superstructural functional aspects of society - consciousness, law, economy - as well as influencing its executive, realization related activities - ecologically-based land use, construction and production.

It must however again be emphasized that we are discussing the environment primarily from human viewpoints. It is here and for this objective that the knowledge has emerged that such environment could only be created and retained if the life condition of other living systems would also be guaranteed, and that the life of any living system can only be maintained if the function of the entire geosystem is retained. This is the ideology of harmony between anthropocentrism and biocentrism, of environmental protection and creation, of a sustainable development.

Thus we have defined the framework and priorities: Among them are the priorities arising from rationally unchangeable ecological conditions given by the position of the planet Earth in the universe, the position of specific regions on the surface of the earth, from ecological conditions ruling each bit of land that can neither be changed nor renewed.

These are the ideological starting points of a realistic ecological policy.

3. The ecological policy of the slovak republik.

According to the theoretical-methodical principles and to the environmental problems in the Slovak Republic, the real ecological policy of the Slovak Commission of Environment (SKZP) goes in 5 main directions as follows:

- a) the practical ecological policy
- b) ecologization of the human awareness
- c) ecologization of the legal and economic instruments of environmental management
- d) ecologization of the land utilization (of the space organization)
- e) ecologization of the technological processes.

The content of these issues is briefly described in the following:

3.1. Practical ecological policy of the SKZP

The gradual transition from a defensive policy of the classically realized environmental protection to the offensive policy of ecologization of the societal development requires treating the tasks with a character of "practical " ecological policy. The main elements are as follows:

- a) The state administration of the environment
- b) Integrated informational system of the environment
- c) International collaboration about the environment

3.2. Ecologization of social awareness

The most important tool for this goal is the development of ecological science and education. The Slovak Commission for Environment would implement the development policy of the ecological science and education through the "Ecological Academy" project.

A specific part of this programme called the "Ecological Minimum" is under elaboration for various groups and various levels of the population.

A comprehensive and offensive research policy for the environmental issues is elaborated too.

3.3. Ecologization of economical and legislative instruments of the environmental control

The ecologization of economical instruments in general has to be directed to create a natural agreement of economics and environment according to the stated thesis "Which is ecological

is also economical (especially from the long-term viewpoint). Pragmatically this thesis may be modified in the form "Which is not ecological must not issue as economically advantageous". The economical instruments must implement economical advantages for "ecological" behaviour of economical branches.

The following groups of economical instruments are concerned:

- limiting instruments in the form of taxes and duties
- sanction instruments in the form of fines, surcharges, interdictions
- supporting instruments which will make the activities oriented towards environmental improvement advantageous (grants, donations, credits, reliefs, capital participation etc.)

The Slovak Fund of Environment is a specific instrument.

The task of the environmental legislation and law is to create a system of prescriptions and standards for guiding the behaviour of institutions and individuals in relation to environment.

The right of citizens for faultless environment will be anchored in the entire Czech and Slovak law and order, at the general level in the federal and republical constitutions.

3.4. Ecologization of the organization, exploitation and protection of the landscape (ecologization of the land use)

This is one of the main drives of the official ecological policy. The theoretical-methodical basis for it is the applied landscape ecology. In this way the landscape ecology become part of the state policy.

This part of the ecological policy represents the space aspect of the environmental care. The ecological optimization of integration of the territory development control will at the same time implement:

- optimization of the space organization of economical activity
- overall ecological stability of the landscape
- protection of nature, biodiversity and genepool
- spatial protection and rational exploitation of natural resources
- harmonization of urbanistic and architectonic development with landscape-ecological conditions

The realization of this program will be implemented through the following main

programs:

a) Ecological loading capacity of the territory

This instrument will be a part of territory development control as a limiting factor of conditions for man's activity development in the space. It will be incorporated in the law on territory planning

b) Territorial system of ecological stability (TSES)

The goal is to maintain the biodiversity and ecological stability of the landscape as a new approach to the nature protection. The essence is, that single ecologically stable isolated ecosystems do not suffice - the entire space system of interconnected elements - the territorial system of ecological stability (TSES) is needed.

The TSES is or will be a part of law on nature protection, law on territory planning, law on land arrangement and law on environment protection.

c) Development of regions (territorial planning of the regional level)

It will be an instrument to treat conflicts of interests in the territory, to meet purposes of the territory development based on determination of the territory loading capacity. This is the basic part of territorial planning.

d) Program of village renewal

This new instrument is oriented towards treating the complex situation in the development of the country performed hitherto, where life conditions in the last 40 years have been worsened, the population has been reduced, the house fund has fallen into decay and overall failure has occurred.

e) Conception of declare and precision the protected territories and protected natural phenomena

Five national parks, 16 protected landscape regions, 369 state natural reserves, 105 protected deposits, 19 protected study areas, one protected park, 3 protected gardens and about 250 protected natural phenomena were declared until June 30, 1991 in the Slovak Republic. At the same time 10 large scale protected water-protection regions were registered.

The conception of building up the network of protected territories and protected natural formations envisages the establishment of another 5 national parks, several protected landscape regions and about 110 small scale protected areas (nature reserves).

f) World cultural and natural heritage

In 1990 the CSFR acceded to the "Agreement on protection of the world cultural and natural

heritage" accepted in 1972 in Paris. The following items have been proposed to be included in the list of the world cultural heritage on the first places:

- the historical centre of Prague (for the Czech Republic)
- the historical town Banská Štiavnica with the surrounding cultural monuments (for the Slovak Republic)

The following items have been proposed to be included in the list of the world natural heritage on the first places:

- the potential national park Czech Switzerland (for the Czech Republic)
- the Tatra National Park (for the Slovak Republic)

3.5. Ecologization of technological processes - technology of the protection of the environmental components

At present this is the decisive practical field of the environmental quality control embodying the endeavour to importantly affect the strategy of the development of production branches. It represents the technological aspect (in a broader meaning) of protection control of the different environmental components.

At present the SKZP enters this process, above all through its state-administrative activities where it monitors the impact of economical activities on the quality of the atmosphere and water. It monitors the production of waste and its disposal and the other risk factors (irradiation, noise, vibrations etc.). A very wide range of aspects is concerned.

The main programs of the SKZP in this sphere are as follows:

- a) protection of the water quantity and quality
- b) program of building up sewage treatment plants
- c) disposal of solid waste
- d) atmosphere protection

Improvement of the atmosphere quality in CSFR is a priority task for gradual renewal of life conditions at all.

- e) protection against other risk factors

4. Conclusion

All above mentioned principles have been concretized to the Program of the Environment Care in the Slovak Republic. This program has been approved by the Government of Slovak Republic in July 1991, as well as many others of the concrete materials of this program. So the program is the basic target direction of ecological policy in the Slovak Republic.

WORKING GROUPS**PROPOSAL FOR THE PROGRAM OF THE IALE WORKING GROUP "LANDSCAPE-ECOLOGICAL PLANNING".**

Ladislav Miklos
Slovak Commission of Environment
Deputy Minister
Chairman of the working group.

The new political situation in Central and East-european countries also opened the borders for a new economical and social movement expressed as the regional approach to the development policy - "Europe of the regions" (not Europe of the countries). Of course, the regions have their own natural - socioeconomic borders, their specific inner structure and specific natural conditions of development. Accepting these conditions - apart from the political borders - we can make the decisive step towards the proclaimed sustainable development, not accepting both ecological and

economical loss.

The goal of this program is a model of the natural prerequisites for the development of the natural-socioeconomic regions in the new Europe. It is a complex program in pilot (1.) stage, concerning only some countries, or just part of countries. In the future it could be completed for the whole of Europe.

Content of the program:

The whole program could be divided into a coordinating project aimed at development of common methods for the whole territory concerned, and a project of final results for whole territory. The core of the result is the projects of the Ecological General Model for the development of the single regions of Europe. Each of these regional (national) projects should have 4 main parts.

The proposed content of these parts (subprojects) are as follows:



The main watersheds and borders of the positional zones

Types of the positional zones (prevailing optimal functions):


-  Initial (Ties with neighbours, inner development, recreation)
- Transitional (Transit, international cooperation and trade)
- Terminal (Continental - overseas trade and cooperation)
- Costal shore basins (Local development, recreation, costal trade)



Figure 1: The natural positional zones of european basins - a scheme

Subproject I:

The natural-socioeconomic gravitational regions, their structure, natural interconnection and optimal use.

Content:

- demarcation of regions according to natural conditions (partial basins of river, interriverian flatlands, plateaus) apart from administrative borders
- natural directions of the interconnection of the region
- the inner spatial structure of the geosystems in the regions, the current landscape structure (land use structure)
- the natural energetic (solar-water-gravitational) balance and the natural resources of the region
- the current socioeconomic gravitation of the settlements, its comparison with natural direction of interconnection and demarcation of complex regions.

Goal:

Proposal for optimal interconnection, organisation and utilisation of the natural regions including those of crossbordering regions. Textual, cartographic and GIS expressions of the results.

Subproject II:

Territorial system of ecological stability.

Content:

- the ecological state (stability) of current landscape structure.
- the bearing and loading capacity of the landscape, stage of synanthropy and balance.
- the cores and main axes of ecological stability - the protected area, their hierarchical level, stage and their optimal utilisation. Biocentres and biocorridors.
- the biodiversity.
- the mode of the utilisation of the buffer zones of biocentres and biocorridors and the protection of the rest of the landscape by ecological optimal organisation and utilisation.
- the area of water resources protection, their rational organisation and utilisation.
- the forest resources, their ecological stage and optimization of their use.
- sources of the health and recreation (including spas), their stage and mode of development.
- the aesthetic values of the landscape, landscape

perception.

Goal:

Proposal for the creation of a territorial system of ecological stability - the international net of protected areas. Proposal for the rules of the mode of protection of the entire territory and rules of the land use in protected areas. Textual, cartographic and GIS expression of the results.

Subproject III:

Territorial system of human impact on the landscape

Content:

- the current stage of urbanisation and the prognoses, development of the urban-rural areas and revitalisation of the rural landscape.
- the dynamics of inhabitants in the regions.
- the chosen characteristic of the health stage of the inhabitants.
- the stress factors of the energetics, industry and traffic; sources of air, water and soil pollution and traffic intensity.
- emission-affected areas according to:
 - measured values
 - bioindicators
 - models
- rate of agricultural production intensity, quantity of used energy and agrochemicals.
- territory by important soil erosion and other soil degradation.
- degree of ground and surface water quality.
- overloaded recreational areas, adverse impact of recreation on landscape.

Goal:

Proposal of the solution of the areas with encounters of both the stress factors and the ecologically stable areas.

Textual, cartographic and GIS expression of the results.

Subprojekt IV:

Landscape - ecological prerequisites for the development of natural-socioeconomic regions

Content:

- syntheses of the subprojects I, II and III.

- a) Natural-socioeconomic potential of the regions
- the gravitational-positional potential of regions
 - the bioenergetical potential of the regions
 - the natural sources potential of the regions
 - the environmental potential of the regions
 - the human potential of the regions
- b) The suitability of the region for main human activities
- the suitability for the settlement development
 - the suitability for the recreational development
 - the suitability for the agricultural, forestry and water management
 - the suitability for the industrial development
 - the suitability for the communication, transport, trade

Goal:

The complex proposal for the landscape ecological prerequisites of the development of the natural-socioeconomic regions.

- natural prerequisites for the cooperation of the regions - possibilities for the optimal interconnections

- natural prerequisites for the optimal development of each region according to their structure and position apart from the borders.

Textual, cartographic and GIS expression of the results.

C. Coordination of the program

a) The main coordination and, of course, the coordination of the coordinating project should be provided by WG "Landscape-ecological planning". There is a need to create a main coordinating team. The task of this team is to develop the methods and create the "national" teams for the project work.

b) The national coordination is also a very complex piece of work, so a team skilled in geosystem approach to the landscape is needed for the coordination.

c) The main method is considered to be the synthesis of existing data according to unified methods. New researches should be only for

completing lacking knowledge.

d) The programme as a whole is split up into smaller subprojects which can be worked out in a more or less comprehensive way. The modularity makes it possible to work out the basic frame of the project, which could be completed step by step in the future.

e) The cooperation of computer specialists on GIS is needed and the cooperation of cartographers for the final elaboration of "Atlas" is needed.

Schedule for the program

All projects and subprojects will consists of 3 main periods: Analysis, synthesis and proposal.

A more specific time-schedule is to be developed by the coordinating team.

P**roposed results of the program**

- Atlas of the regional development of the European regions.

- Proposal for environmental management for government, business, public and NGO's.

- Educational instrument.

- Basis for regional and territorial planners - proposal model for optimal, ecologically sound development of the region.

The projects also include helping methods serving the main goal - implementation of remote sensing methods, creating an information system of environment, the publishing of results etc., which could also result from the main direction independently.

During the elaboration of the programme the teams should have several coordination meetings (workshops) and some seminars for the whole programme.

The specific issue - Atlas of the regional development - should be underlined as the very important tool for the common development of the whole region.

Summary of the program**Title:**

Landscape-Ecological Prerequisites for the Common European House.

Content:

A complex landscape-ecological model for the ecologically sound organization and utilization of the territory. It is aimed towards the preparation of

the natural-scientific basis for the new sound regional policy for the development of "Europe of regions" (not Europe of states).

The key goals:

Political:

To contribute to the opening of the borders and bringing the nations closer to each other, to support the regional approach to the common development of Europe according to the natural- - socioeconomic regions apart from the political borders.

Economical:

The conformity of both natural gravitation and socioeconomic movement is an economic advance, while the opposite is an economic and ecological loss.

Environmental:

The environmental problems do not accept the borders.

Ecological:

The ecological stability, the motion of organisms might be kept only on international level. Many of the protected or other very valuable areas are crossing the borders.

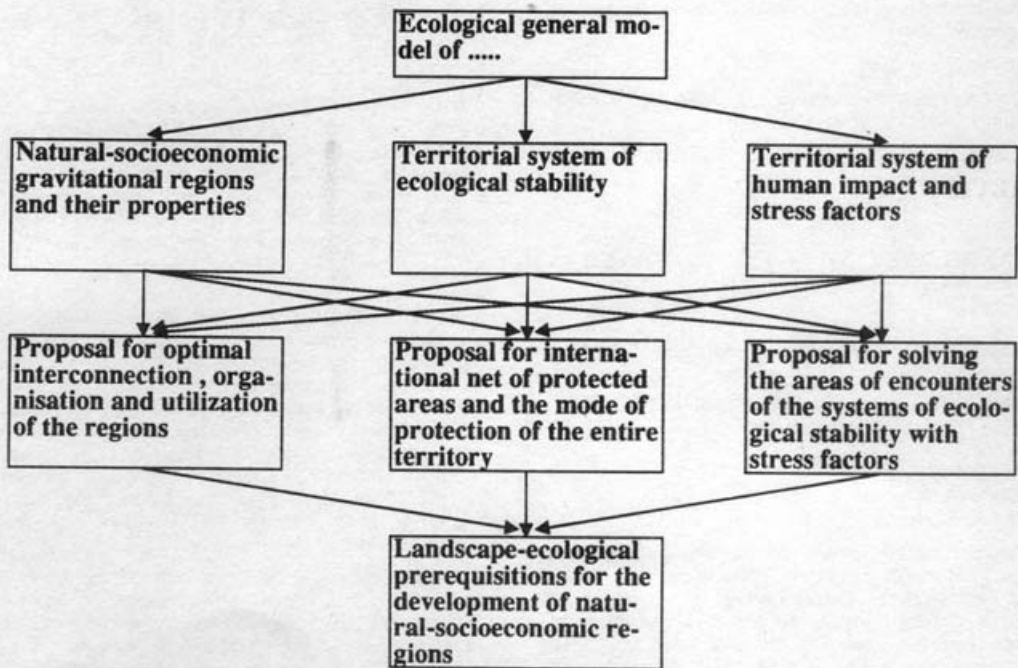


FIGURE 2: The scheme of the program : Regional projects for the countries.

IALE MEETINGS

7TH ANNUAL U.S. LANDSCAPE ECOLOGY SYMPOSIUM.

The symposium will take place on 8-11 april 1992 in Corvallis, Oregon.

The title of the symposium is: Regional landscape change: Impacts of climate and landuse.

Five major theme sessions will be emphasized:

- Land use planning
- Biodiversity
- Rivers in the landscape
- Landscape-scale experiments
- Modelling and regional-scale research and management.

Contact: See dairy.

Observe the new traveling scholar award mentioned under the news p.12.

REVIEWS

LANDSCAPE ECOLOGY GOES INTO ENGINEERING:

Nature engineering and civil engineering works

P. Aanen et al.
1991, 140 pages, hardbound, ISBN 90-220-1053-8
Price f 70.00/US\$47.00
Pudoc
P.O.Box 4
6700 AA Wageningen
The Netherlands

Practical transformation of nature at the landscape level has traditionally developed on the basis of the applied science of engineering: Construction of roads, canals, railways, bridges and other sorts of infrastructure, as well as land reclamation, coastal protection, water management and construction of drainage systems, and any sort of buildings, in short the most important parts of the territorial structure of society, has been based on engineers plans for transformation of matter and energy at the landscape level to serve given social and economic needs. Their success has been closely related to their ability to overcome natural obstacles and re-creating the environment in the existing image of man.

Facing this all-embracing landscape-transforming activity it can be seen as a sort of paradox, that

IALE, explicitly founded "to promote communication between scientists and planners and interdisciplinary scientific research", only to a very limited degree have engineers among the members. There might however be a logical reason: Namely that the emergence of landscape ecology as an interdisciplinary science with strong applied ambitions can be seen as a sort of reaction to the ideology of the traditional engineering: Landscape ecology has also an ideological overlay meaning priority to the dynamics of landscape systems, and a wise adoption of man-made landscapes to this dynamics, including the possible stabilizing effects of bio-systems, rather than giving priority to the realization of man-made ideas about man-controlled systems, often avoiding green elements not corresponding former ideals of a controllable environment.

Up to now the engineers have only to a minor degree been assisted by specialists taking up a landscape ecological point of view: Landscape architects, foresters, agronomists, ecologists and different types of physical planners coming from other disciplines (e.g. economists, sociologists, geographers). This is however changing these years, and can be seen as a result of the rapid ecologization of society and the growing acknowledgement of necessity of a comprehensive transformation towards a sustainable development.

It can however also be seen as a result of the development within engineering itself, more and more incorporating landscape ecological theory and methods in planning and construction. This is partly done to compensate for the damage on nature due to the construction works, but also because a landscape ecological approach in many cases has proven to be economically clever, especially reducing the cost of maintenance. This last reason is basically an economic expression for the benefits of managing along with nature rather than against it, and a main reason (and hope) for the coming ecologization of society.

"Nature engineering and civil engineering works" is a fine well-composed collection of papers dealing with the change of civil engineering works in the Netherlands during the last decades, focusing more and more on the landscape ecological consequences of civil engineering projects and on the possibilities of incorporating landscape ecological theory and method in the planning and management of civil engineering projects.

The 9 papers are written by specialists with connexion to the environmental branch of the Road and Hydraulic Engineering Division of the Netherlands Directorate-General for Public Works and Water Management.

In some remarkable chapters the development

towards landscape ecological layout and management of herbaceous and planted vegetation in road verges, canal verges, river banks and river dykes, is descibed. Problems and solutions for a landscape-ecologically based management of banks of large waters (lakes, rivers, canals), and sea dunes are also given. And thanks to the overall theme, the infrastructural linear landscape elements of roads and canals, the importance of spatial heterogeneity and migration for the long-termed success of a landscape-ecological based nature engineering are very much in focus. In two chapters, theory and concepts on structure and dynamics of ecological communities and the perspectives of the island biogeographic theory are introduced and related to the practical engineering problems.

Case after case shows not only how it is possible to combine the traditional goads of these infrastructural and hydraulic engineering projects with ecological and nature protecting measures, but also how such considerations very often have a stabilizing effect and therefore also a positive influence on the economy related to the main goal: In fact, it is striking, how former management of green elements related to civil engineering works until the beginning of the 80ties was mostly applied for considerations of tidiness, often representing a very expensive Sisyfos work against nature, that cannot be explained economically: Mowing of road verges 7-12 times a year resulting in a monotonous lawn exposed to erosion is simply silly when mowing and removing the vegetation 2 times yearly can increase the diversity, the amount of rare species and gives a closer vegetation layer under the cutting level, thus giving better protection against erosion, the latter being special relevant for the management of dykes. After a time it might in some cases even be lowered to once a year. For that reason mowing schedules have been drawn up in the Netherlands since the early eighties for all verges of national roads. However, shredding of wood in thinnings of planted verges is still widespread, although it is generally une-ecological as well as uneconomical. An the practice of dutch farmers to dump their surplus of slurry manure in winter on the dike slopes, having detrimental effects to the natural and protecting values of these grasslands, shows, that short-sighted economic interests still represents strong hindrances against a landscape-ecological sound type of engineering.

But the book shows in a very convincing way, how landscape ecology is entering one of the main landscape-transforming processes in society (we however still have to be involved in the landscape forming processes related to the direct production of goods and services, including all the cars and other vehicles using and demanding the

infrastructural works!). It is also interesting in the way, traditionally ecological theory (and ideology) on ecosystem development is confronted with practical planning. So, van der Sluij and Melman sticks very close to the ideal of succession, stating that "the starting point for ecologically sound construction of verges is the spontaneous development of the vegetation, preferably on a substrate that is disturbed as little as possible"(p. 81), and argues practical for this in relation to problems connected with the planting of trees and shrubs. On the other hand: de Watering, Melman and Verkaar refers experiments showing how the sowing of hay seed from an existing species-rich flood valley flora on old dykes into a plot on a new dyke can promote the establishment of this type of flora very rapidly(p. 95).

The book is highly recommendable not only to landscape ecologists that wants an insight into the practical application of landscape ecological theory and methods, but also for policy-makers and others looking for an introduction to landscape ecology and its application to practical planning and engineering.

Jesper Brandt

NEWS

THE EEC-R&D-PROGRAMME INVITES LANDSCAPE ECOLOGISTS

For all - not only European - landscape ecologists the workprogramme of the EEC R&D-programme in the field of environment is interesting reading, among other things explicitly inviting "to develop an approach to landscape ecology"

The programme describes the following main areas of interest:

Area I: PARTICIPATION IN GLOBAL CHANGE PROGRAMMES

- A. Climate change and climatic impacts
 - I.1 Natural climate change
 - I.2 Anthropogenic climate change
 - I.3 Climate change impacts
- B. Global changes in atmospheric chemistry and biogeochemical cycles and their consequences for life on earth
 - I.4 Stratospheric ozone
 - I.5 Tropospheric physics and chemistry
 - I.6 Biogeochemical cycles and ecosystem dynamics

Area II
TECHNOLOGIES AND ENGINEERING FOR
THE ENVIRONMENT

- II.1 Assessment of environmental quality and monitoring
- II.2 Technologies for protecting and rehabilitating the environment
- II.3 Major industrial hazards
- II.4 Environmental protection and conservation of Europe's cultural heritage

Area III
RESEARCH ON ECONOMIC AND SOCIAL
ASPECTS OF ENVIRONMENTAL ISSUES

- III.1 The human being, nature and society
- III.2 Environmental policy: Conceptualization, implementation and monitoring
- III.3 Environment on the international scene: the transformation of internal relations

Area IV.
TECHNOLOGICAL AND NATURAL RISKS

- IV.1 Natural risks
- IV.2 Technological risks
- IV.3 Desertification in the Mediterranean area

Deadline for the submission of proposals in 1991-92 are different for the various areas and subareas; for the last dead-line of March 31 1992 the following research tasks are most relevant to landscape ecology:

Under area IV.2, subarea 2: Regional aspects of ecosystems protection:

•"Aggregation, at regional scale, of scientific information and results obtained from research networks and case studies as a basis for developing appropriate management techniques".

The objectives of this research task, is explicitly

- "-to develop an approach to 'landscape ecology'.
- to identify a set of criteria which should be considered as standards to be respected in regional socio-economical development.
- to identify regional structures which suffered from deterioration and to explore the potential for remediation."

Under area IV.2., subarea 1: Risks from agricultural technologies and land use practices to soil, surface and groundwater quality:

- "Development of farming models showing

the relationships between agricultural structures, farm organization, crop rotation and effects on soil, surface and groundwater and on biotope and species variety in view of their impact on the environment.

-Research on the socio-economic background to environment friendly farming and land-use practices and the environment awareness of farmers"

Under area II.4:

- "Incorporation of scientific and technical knowledge into formulation of environmental policy concerning cultural heritage, including risk and damage maps, evaluation of alternative conservation strategies, effects of tourism on cultural property and societal valuation of cultural heritage."

US-IALE DISTINGUISHED SCHOLAR
AWARD

The United States Regional Association of IALE has established a special award to encourage non-USA participation in its annual meetings. The award, which comes with a cash price of approximately \$ 250 US, will be offered for the first time this year to encourage participation at the 7th annual US-IALE symposium to be held in Corvallis, Oregon 8-11 april 1992. (See p. 10). To be considered for the scholar award, please indicate the nature of your interest and the anticipated nature of your participation to Dr. James F. Thorne, US-IALE Distinguished Traveling Scholar Award Committee Chair, Department of Landscape Architecture and Regional Planning, University of Pennsylvania, 210 South 34th Street, Philadelphia, Pennsylvania 19104-6311, USA (Fax: 1-215-898-9215 or BIT-NET THORNE@PENNDRLS)

IALE BULLETIN 1983-91

Due to the change of editor we have done a little re-reading of the previous volumes of the bulletin. We came up with the following list of interesting articles to guide others interested.

General articles on landscape ecology:

- K.F.Schreiber:
What is landscape ecology? (4.1.)
- W.T. de Groot and H.A.U. de Haes:
•Landscape and environmental science: Paradigms in the science/- technology dichotomy (2.2)
- I. Zonneveld:
•Conclusions and outlook of the 1th IALE seminar 1984 Roskilde. (3.1.)

- Reaction to A.Veens paper in 3.1. (4.1.)
- The vegetation scientist, ecology and the environment (8.3-4.)

A.W.L. Veen:

- On the divergency between theoretical and empirical streams of landscape ecological research 3.1.

Z. Naveh:

- Some thoughts on the contribution of landscape ecology and the IALE to the science of ecology. (2.1.)
- Introduction to a workshop on interactions between landscape and culture (9.3.)

R. Jongman et al:

- Landscape ecology and (land-use) economy (5.2.)

On Working group programs:

Groups in function:

Agro-ecosystems: 4.2., 5.2. & 9.2.

Urban ecology: 5.1., 6.1. & 9.2.

GIS: 5.2., 6.1., 7.1. og 9.2.

Cultural aspects: 5.2. & 7.2.

Landscape ecological planning: 7.1.

Alluvial rivers:

(Former Danubian river): 5.1.

(Former Rhine catchment): 4.1., 4.2., 5.2. & 9.1.

Groups finished and out of function:

Ecological infrastucture: 3.1., 5.1., 5.2. & 9.1

Desert ecology: 5.1.

Costal Management: 4.1.

The volumes 7, 8 and 9 can be ordered from the Bulletin editor as long as they are in stock.

Elder volumes can be ordered in copy for the price of the expenses.

GOSSIP

November 25, 00:41 we have got a daughter - 51 cm and 3150 gr. Her name will be Anneli.

Kirsten and Jesper

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- 1) Elected representatives and
- 2) Regional contacts with roles only in communications

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REGIONAL INFORMATION

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- Pasadena, USA
10-13 Feb. 1992
International Space Year Conference on Earth and Space Science Information Systems.
Contact: A.Zygielbaum, Jet propulsion laboratory, 4800 Oak Grove Dr., MS 180-701, Pasadena CA 91109 USA
- St. Petersburg U.S.S.R
1992
Annual workshop on global ecology: "Ecological Problems of Large Metropolitan Areas. The Committee for System analysis of the USSR Academy of Science and others.
Contact: Dr. Valery I. Karpov, Center INENCO, 2 Truda Square, St. Petersburg 190000 USSR. Tel. (812) 311 90 51, 164 50 42 Fax. (812) 311 40 89
- Münich, Germany
23-26 Mar. 1992
European Conference and Exhibition on EGIS:92
Contact: EGIS Conference Bureau, Faculty of Geographic Sciences, PO-Box 80-115, 3508 TC-Utrecht, The Netherlands, Tel. *3130534261, Fax: +3130523699
- Athens, Georgia, USA
5-7 Apr. 1992
International Symposium on Environmental Ethics. University of Georgia and Fondazione Lanza.
Contact: William F. Prokasy, The university of Georgia, Old College, Athens, Georgia. Tel. (404) 542 5806. Fax. (404) 542 0419
- Cork, Eire
5-8 Apr. 1992
BES Annual Symposium - Aquatic Ecology: Scale, Patterns and Processes.
Contact: British Ecological Society, Burlington House, Piccadilly, London W1V 0LQ, UK.
- Corvallis, Oregon, USA
8-11 Apr. 1992
7th Annual U.S. Landscape Ecology Symposium: Regional Landscape change - Impacts of Climate and Land Use.
Contact: OSU Forestry Conference Office, Peavy Hall Room 202, Corvallis, OR 97331-5707. Tel. 503-737-2329. Fax. 503-737-2668
- Montecatini, Italy
27 Apr.-1 May 1992
Landscape approach to regional planning.
Subthemes: The future of Mediterranean landscapes, IALE working group planning conference, IALE task force on Red-books. Contact: A.Farina, Museum of Natural History and Laboratory for landscape ecology, 54001 Aulla, Italy.
Tel. +187-420374, Fax. +187-420727
- Waterloo, Canada
9-14 Aug. 1992
4th Annual Conference: Society for Ecological Restoration.
Contact: Society for Ecological Restoration, 1207 Seminole Highway, Madison, Wisconsin, 53711 USA. Tel. +2629547
- Tokyo, Japan
28 Aug. - 3 Sep. 1992
15th International Botanical Congress.
Contact: M. Furuya, Frontier Research Programs, The Riken Inst., Wako City, 351-01, Japan
- Marseille, France
7-11 Sept., 1992
6th European Ecological Congress. Organiser by European Ecological Federation and Soci t  France d'Ecologie.
Contact: Dr. D. Bellan Santini, Centre d'Océanologie, Station Marine d'Ednouve, rue Batterie des Lions, 13007 Marseille, France. Fax: 33 91 04 16 35
- Prague, Czechoslovakia
September 1992
2th international conference: Cultural aspects of landscape. Organized by Iale working group "Culture and landscape". Contact: Dr. Hanna Swouden-Svobodová, PObox 75020, 1007 AA Amsterdam, The Netherlands. Tel. (0) 20-66251421.

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