

# Urban greens for recreation, outdoor activities and nature experience

Stefan Türk

**Abstract** — A modern management of recreational areas for communities should be understood as a useful planning tool. Only an active management of such natural areas nearby settlements, used for outdoor and recreational sports and nature experiences, will fulfill long-term recreation planning in communities and will yield in an increasing quality of life and environmental issues for its habitants. However an integrated concept is needed, which means all categories of recreational issues have to be brought together throughout all departments in a reasonable way. That accounts for all communities independent of its size and structure. Management of recreational areas is not a further inconvenient development planning tool; it is an effective instrument for advancing natural orientated recreational areas.

**Index Terms** — Urban greens, management concepts, guidelines.

## 1 INTRODUCTION

Most of our urban greens are areas for sportive or recreational activities for people at all times and seasons. But generally, they were not planned or developed for these activity forms, even if they are used preferentially in this way. Mainly in densely populated areas the intensive use of greens will cause ecological stresses by direct or indirect damages. Regarding the value of urban greens (table 1) it becomes more and more important both to protect the nature and to ensure recreation activities in the same area of urban green.

But who is responsible for these processes of planning or development? Is it the municipal department of sport, the department of nature conservation, or the department

of urban development? To overcome these inhibitions of segmentation in the public administration, towns and municipalities have to look for adequate concepts to develop their greens and open spaces.

TABLE 1

WHAT IS THE VALUE OF URBAN GREENS?

---

### ecological aspects

- ◆ habitat of animals and plants
- ◆ melioration of bio-climate, e.g. filtering of air pollutants and respirable dusts, optimizing humidity, balancing temperature, etc.
- ◆ generation of groundwater

### economical aspects

- ◆ appreciation of the business location
- ◆ increasing of the local or regional image
- ◆ contribution to the health care of the inhabitants

### social aspects

- ◆ increasing quality of life
  - ◆ precision of environmental awareness
  - ◆ nature experiences
  - ◆ positive cultural development
- 

---

*Stefan Türk is employed at the Institute of Outdoor Sports and Environmental Science, German Sports University Cologne. D-50933 Köln. E-mail: tuerk@dshs-koeln.de*

## 2 BUILDING BLOCKS FOR A MANAGEMENT OF RECREATIONAL AREAS

### 2.1 Political framework for action

Local affairs are the basement for the public administration. The political framework for action is responsible for all the planning and construction processes in urban greens. It will be necessary to install a coordination office, to which deputies of all involved administration departments belong. The coordination office controls the planning processes, develops aims, targets, and new strategies, balances offers and demands, and controls the success.

In public administrations three different types of coordination offices exist, each with its own pros and cons. 1) Most of the administrations prefer the task force type. The work in teams is well established, and the flexibility in structure and composition is very attractive. But often the frequency of meetings is not high enough or there are too many topics to handle with. 2) Another type is found in the network. In any order expandable and flexible, it must be directed and controlled very intensively. 3) At last only in some administrations separate departments exist. Such departments are able to handle also extensive processes and optimize the planned operations. But to build up a separate department structure is expensive in time and money.

### 2.2 Stock and need

An effective management needs data. By the analysis of stock and need a lot of information about sports, activities and recreation on urban greens will be sampled (table 2). For the data collection, which is normally done by specialized independent, freelancing consultants, different sampling methods are useful. Studies of the behaviour of sportsmen are well done by interrogation. Also by direct measurements, e.g. personal counting, counting via infrared camera or video, or at turnstiles and gates significant results will be obtained. Another

TABLE 2

#### SPORTS WITHOUT ARENAS

- 
- ◆ more than 70% of all sports activities will be self organized and done without being sports club member
  - ◆ nearly 50% of the costumers of activity and recreation areas do not visit sport arenas or fields anymore
  - ◆ traditional reason for sports as success, competition, effort will be displaced by fun, health and experience
- 

possibility is the use of drones, resulting in impressive video analysis of visitors flow and behaviour. Within the interpretation of these data ratings for a future development are possible.

For an ideal case all the data will be collected and offered in a digital information system of areas for activity and recreation for the whole administration. Urban green information systems are a special type of geographical information systems, and combine sociological data with the environmental ones. Sustainable development processes, e.g. for trails or recreation sites, can be simulated, possible conflict areas can be defined, costs for building and maintenance can be calculated. And last but not least this type of information system is very useful in public relations.

### 2.3 Offer

No space for recreation and sportive activity is like another. That means that the following questions must be answered for the development of attractive offers: Which demands will people really have on future areas for activity and recreation? Is it possible to balance different interests on the same area or space? Where and how a municipal administration can realise these demands? Answering these questions different criteria for urban greens are of interest: 1. the site, which e.g. means reachability, catchment area, site development, structure and dimensions,

natural cover, etc.; 2. psychosocial aspects as open or hidden spaces, public or non public places, visible marks of different user groups; 3. environmental factors, e.g. emissions or pollution by noise, chemical concentrations, etc. 4. rights of private or public properties within leasing or renting, agreements and contracts, regulations by law; and 5. the declared aims of the urban development.

Based on these criteria the local affairs must result in precise strategies and guidelines. In this context it is a matter of fact that the customers satisfaction depends on the frequency and variety of the experiences, which the offers allow. The attractiveness is strongly correlated to the realised ideas and infrastructure. Well used areas offer modern trail concepts or typified playing grounds for all the demanded activities. That range from walking trails over climbing trees in a park to an open air fitness course. By being active in urban greens the experience of nature and landscape plays an important role. But it is not the ecological value, it is more the experience of seasons and weather. And especially large greens stimulate the sense of their visitors in a unique way because they are in contrast to the settlement.

It is elementary that the costumer feels himself comfortable staying in an activity area. Therefore, it is necessary to regard the psychological needs, as sites for resting, silence, facilities, the social needs as meeting points, look around, and at last the security demands as actual routing and maps, illuminated trails.

**2.4 Realisation and further development**

The core of the realisation is a catalogue of measures to achieve the declared aims (table 3). This catalogue must be specific to every town or municipality.

Each target group needs its own strategies. And it is necessary to know as much as possible about the requirements of the activity areas of the target groups. Basically it

could be shown that independent of the activity form the following points must be regarded to minimise conflicts: a) a good sign posting for orientation, b) an in time maintenance of trails and grounds, c) a participation of users during the planning procedures, d) defined rules of liability, and e) the regulation of traffic, especially car-traffic crossing the urban greens.

TABLE 3

THE AIMS OF THE MANAGEMENT CONCEPT

short term	
◆	better and intensive communications within the administration
◆	grouping relevant information for planning and development
◆	detecting of local deficiencies in planning and development
medium term	
◆	generation of sustainable offers for activities and recreation in order to the real demand
◆	optimizing the urban greens for recreation as well as for nature conservation
◆	continuous optimizing and upgrading of the functions of urban greens
long term	
◆	increasing the quality of life for inhabitants
◆	increasing the efficiency of planning processes
◆	reducing the administrations costs

To solve problems or conflicts while building up activity and recreation areas sometimes only a small and single step has to be done, other times it results in a huge project of town development. Often models are helpful to generate attractive spaces for activity and recreation.

**2.5 Monitoring and evaluation**

A continuous optimizing and upgrading of the quality of the areas of activity and recreation can be realised using the PLAN-DO-CHECK-ACT-circle. In detail the contents of Plan-Do-Check are listed in 2.1 to 2.4. In consequence the phase of ACT results

in controlling the former phases to confirm the success or uncover lacks. Clearly documented conflicts and problems as well as positive effects are of an important role in order of their relevance for further development.

TABLE 4

THE BENEFIT OF A MANAGEMENT SYSTEM FOR  
ACTIVITY AND RECREATION AREAS

- 
- 
- ◆ the communication within the departments of the administration will be more effective
  - ◆ decision making will be faster and secure in case of the optimized data base
  - ◆ administration expenses will be optimized while costs will be reduced and quality increased
  - ◆ conflicts will be solved earlier or avoided
  - ◆ information will be more believable
- 
- 

Only by an early monitoring process it will be possible to prevent and counteract aberrations; and to give details for improvements and mending. Sustainable strategies need such instruments of evaluation and quality management. And then the proposed management system for activity and recreation areas will work and the benefits became perceptible for both the administration and the costumer (table 4).

## REFERENCES

- [1] H. Kretschmer, "Naturorientierte Bewegungsaktivitäten im urbanen Raum. Ein Beitrag zur Planung von siedlungsnahen Erholungsflächen." Dissertation, Deutsche Sporthochschule Köln. 162 P. <http://zb-sport.dshs-koeln.de/Dissertationen/2007/Holger-Kretschmer.html> 2007
- [2] R. Roth, S. Türk, H. Kretschmer, F. Armbruster,

and G. Klos, "Menschen bewegen – Grünflächen entwickeln. Ein Handlungskonzept für das Management von Bewegungsräumen in der Stadt. Bundesamt für Naturschutz 54 P., 2008

- [3] R. Roth, S. Türk, H. Kretschmer, and G. Klos, "Siedlungsnahen Flächen für Erholung, Natursport und Naturerlebnis. *Naturschutz und Biologische Vielfalt NaBiV*. Bonn, Heft 51, 112 P. 2008
- [4] R. Roth, and S. Türk, "Move people – develop green spaces". In: R. Roth, and E. Jakob, (editors). Congress Report "Environment, Conservation and Sport in Dialogue". Biodiversity and Sport – Prospects of Sustainable Development. 4th Congress at the German Sport University Cologne on 4 and 5 March 2008. Institute of Outdoor Sports and Environmental Science, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Federal Agency for Nature Conservation (Publishers): Series "Outdoor Sports and Environmental Science" Vol. 23 (ISSN 1612-2437) pp. 63-67. 2008.
- [5] S. Türk, "Sustainable development of sports and exercise areas". In: R. Roth, and E. Jakob (editors). Congress Report "Environment, Conservation and Sport in Dialogue". Biodiversity and Sport – Prospects of Sustainable Development. 4th Congress at the German Sport University Cologne on 4 and 5 March 2008. Institute of Outdoor Sports and Environmental Science, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Federal Agency for Nature Conservation (Publishers): Series "Outdoor Sports and Environmental Science" Vol. 23 (ISSN 1612-2437) pp. 91-94. 2008.

**Dr. Stefan Türk** Since 1999 assistant lecturer and researcher at the Institute of outdoor sports and environmental science at the German Sport University Cologne. Deputy head of Institute. Main research topics are the use of near natural landscapes by outdoor sports and recreation activities as well as the arrangements of landscape as sport areas. Member of the expert group for the design and development of the master study "Sport tourism and leisure activities" at the German Sport University. Lecturer in the additional study „Sport and Environment - Management“ and trainer in shooting (air gun, air pistol, .22 pistol). Since 1998 sworn expert of the forestry commission of North Rhine-Westphalia.