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Study on urban green space planning strategy considering ecological effect

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Abstract: *At present, people pay more and more attention to the benefits of urban ecological environment, including the demands of human living environment. Based on this, through the research on urban green space planning strategy considering ecological effects, and on the basis of fully clarifying the supporting conditions for integrating ecological effects into urban green space planning and the contradiction between supply and demand existing in the current planning, from improving the planning and control of urban green space system, establishing the performance evaluation and monitoring system of urban green space ecosystem Several planning strategies are proposed to realize the compound ecological effect and service function of urban green space. It is expected to provide an important basis for solving the contradiction between supply and demand in urban green space planning and realizing the reasonable maintenance of urban green space.*

Keywords: *ecology; greenland; effect; Strategy; plan; city*

1. Introduction

In recent years, the growth and rapid development of the national economy have promoted the gradual expansion of the scale of the city. In the process of urban construction and development, the meteorological environment has a very serious impact on the ecological effect, especially the emergence of urban "heat island" and "Turbid island". For the construction and planning of urban green space, it can usually optimize the natural ecological environment, and in the current related fields, this paper makes an in-depth exploration on the relationship between urban green space and "heat island" and "Turbid island". The construction of green space will have a slight increase in temperature during the day and a slight decrease in temperature at night in winter; In summer, it will promote the reduction of ground wind speed by increasing the greening area, which is conducive to alleviating various urban ecological problems [1]. At present, the existing urban planning strategy has improved the construction level of urban green space and optimized the urban spatial pattern since its implementation. The implementation of urban planning strategy should fully meet people's growing awareness of ecological and environmental protection as the goal. However, at present, the existing green space planning lacks the rational development of resources and services that can be used by the urban green space system itself [2]. Therefore, from this point of view, there are still deficiencies in the current urban green space planning, which is quite different from the development goal of urban ecological civilization construction. Based on this, this paper studies the urban green space planning strategy considering ecological effects.

2. Supporting conditions for integrating ecological effects into urban green space planning

The life services provided by the ecosystem for social groups can be regarded as the key to promote human survival and development. People will obtain needs in the urban ecological environment in their daily life, including the support services, resource services, environmental services and regulation services provided by the ecosystem for social groups. In the process of urban green space construction, effective measures can be taken to optimize the supply and demand of urban green space, which is also the main measure to ensure the sustainable survival of urban groups, Provide spiritual, cultural and artistic needs for the group. Therefore, it is very necessary to integrate the concept of ecological effect into the planning, construction and development of urban green space, and the latter can also be considered as the core supporting condition in the development of the former.

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3. Analysis on the contradiction between supply and demand in urban green space planning

In the in-depth study of urban green space planning and construction, it is found that there are loopholes in this aspect in most cities. For example, in some high-efficiency development cities, there is a significant problem of "paying attention to urban economic development and neglecting urban environmental construction", although relevant units have adopted issuance policies and behavior guidance in this process, Optimize the green space planning, but due to the lack of institutional constraints and direction guidance in this process, the implementation of relevant work has been unable to achieve the expected effect. There are also some urban areas with superior conditions but lack of effective implementation plans, resulting in the waste of good ecological environment, and even the original green space in some cities can not be guaranteed [3]. Under this development trend, the sustainable development ability of green space ecosystem decreases significantly, the survival rate of vegetation and organisms in the ecosystem decreases, and the species diversity cannot be improved, resulting in the weakening of the sustainable supply ability of the ecosystem. Even if some urban areas have taken effective measures for green space construction, but after the completion of the construction, there is no follow-up management, resulting in the poor efficiency of green space in the city.

4. Urban green space planning strategy considering ecological effect

4.1. Improve urban green space system planning and control

In order to solve the above problems and improve the efficiency of planned green space in the city, this chapter puts forward measures to improve the planning and control of urban green space system from the perspective of ecological effect [4]. For example, when planning urban green space, we should comprehensively consider the biological characteristics of different areas and the service functions that can be provided to group life. In the absence of the main body and control object of green space construction, we should adopt the way of increasing the establishment of green space and establish an effective protection barrier for green space. In this way, we can solve the problems of insufficient regulation function and low degree of landscape beautification after the construction achievements are put into use. At the same time, it puts forward rigid constraints and management indicators for different green areas, encourages more social groups to participate in the construction of urban ecological green space, fully implements and promotes the guidance of policies and the interpretation of public systems, and realizes the standardized protection and orderly development of green space.

4.2. Establish the performance evaluation and monitoring system of urban green space ecosystem

According to the incomplete statistical data of the market, the main reason why the existing urban green space can not play its role is that the monitoring and evaluation of green space are not implemented in place, and even some areas are still using rigid data to restrict the development of green space, but based on the essential analysis, this method is very unreasonable. When carrying out this work, we should pay full attention to the ecological benefits, economic benefits, landscape benefits and humanistic benefits of green space in the city, and evaluate its ecological value from a comprehensive perspective [5]. We should not only reasonably arrange the number and land occupation scale of green space in construction and planning, but also comprehensively consider the integrity, connectivity, stability, diversity and other quality indicators of green space. If necessary, modern technologies such as GPS technology, GIS technology, VR technology and digital technology can be introduced in this work to model and evaluate the construction results. In this way, the supervision and management of green space construction based on multi-dimensional can be realized, and the green space planning and construction scheme can be improved and improved continuously.

4.3. Realize the service function of compound ecological effect of urban green space

On the basis of the above contents, the comprehensive benefits of green space in urban development should be considered. For example, a perfect and optimized urban green space can not only purify urban air, beautify urban landscape and optimize urban humanistic spirit, but also provide group leisure places, show urban historical features Reduce the probability of urban natural disasters. In order to fully implement and promote this work, we should fully integrate the green space construction into the urban landscape construction, and form a green space protection network with regional culture

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by means of joint development and construction according to the existing fragmented landscape and isolated island mirror image of the city. In this way, we can highlight the overall style of urban green space, further reflect the efficiency of green space in urban development and construction, and ensure the comprehensive promotion and implementation of green space service function and natural disaster regulation in urban planning and construction.

5. Conclusions

From the perspective of ecological effect, this paper deeply explores the urban green space planning strategy, and puts forward various specific implementation schemes. According to the above contents of this paper, the planning of urban green space can solve the imbalance between supply and demand of the limited urban green space resources to provide ecological services for the city and the continuous demand for ecological environment, so as to better realize the utilization and protection of urban ecological environment and create an urban green space system with natural ecological effect. In the actual process of urban green space planning, in addition to fully implementing in accordance with the above contents of this paper, we should also combine the idea of flexibility to realize the protection of natural resources, so as to solve the existing ecological problems of the city. At the same time, the planning should also pay attention to the needs and feelings of people in the city, so as to realize the urban green space to provide services for human beings, which also has more important practical significance for the improvement of human living environment.

References

[1] Xia Zheyi, Yuan Chengcheng, Liu liming, Liu Hailing, Study on Residents' value perception characteristics of productive landscape of urban green space -- taking rice field landscape in "three mountains and five gardens" area of Beijing as an example [J]. Urban development research, 2021,28 (07): 57-64.

[2] Li Kunyang, Lu Lin, Study on spatial distribution of urban green space service based on POI data -- a case study of Zhengzhou City, Henan Province [J] Regional research and development, 2021,40 (06): 75-80.

[3] Liu Fangxin, Zhao Jijun, Han Yiwen Research on the development and practical characteristics of urban green space in China from the perspective of "ecological view" in the early stage of reform and opening up [J]. Garden, 2021,38 (12): 68-74.

[4] Duane, Ideological analysis, existing problems and development prospect of urban green space tree species planning since the founding of the people's Republic of China [J]. Chinese gardens, 2021,37 (S2): 102-105.

[5] Guan Lehe, Application of precious tree species in urban green space -- a case study of Taopu central green space in Shanghai [J]. Chinese gardens, 2021,37 (S2): 111-115.