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Current State of Parks in the Sviatoshynskyi District of Kyiv

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Abstract. In the issue of Kyiv's greening strategy, an increase in the number of public parks in each district of the city was noted, but their expediency is not always substantiated. That is why the purpose of the study is to highlight the role of public parks in the urbanised environment and to analyse normative indicators. An analysis of the quantitative indicators of public plantings within the public parks of the Sviatoshynskyi district of Kyiv was carried out. The actual number of public parks, their areas, and the main results of the public park survey have been established. Based on field studies and cartographic materials parks are classified according to visual features. The sizes, areas, shapes, layout, and composition of the plantations at the experimental sites were determined. Classification by functions: transit, recreational, memorial, and by the time of creation. It was established that 70% of the district's parks are intended for short-term recreation, and the largest number of parks are located along the streets (39% of the total area of the district's parks). It was determined that the territories of public parks of the Sviatoshynskyi district occupy small areas (from 0.11 to 7.86 ha) and are evenly distributed throughout the district. In terms of shape, parks of a rectangular configuration predominate in the city – 35% by area, and in terms of appearance – parks of a small area (up to 0.5 ha). The composition of plantings is dominated by parks with a preference for deciduous species (40%). It was determined that according to the functional purpose, most of the parks perform the function of short-term recreation, and according to the time of creation, the majority of the parks were established in 2016-2020. The presented classification would allow to systematise the existing territories and developing the classification of the parks of the Sviatoshynskyi district of Kyiv

Keywords: classification of public parks, green spaces, plant assortment, urban ecosystems, hedges

Introduction

To ensure an optimal human living environment in megacities, an important issue is the creation of a holistic and continuous landscaping system. Urban green spaces include gardens, vegetation cover, and trees that contribute to ecosystem services [1]. Given the significant pace of development of large cities, which leads to the compaction of living space and reduction of green spaces, it is necessary to pay considerable attention to existing parks and territories where they can be created. Occupying a small area, the territories of parks within districts provide an important function for the establishment of an

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architectural and planning structure. In addition to recreational requirements, a park, as a small green space, must also meet aesthetic requirements, as these areas address the issues of interconnecting the environment and building exteriors, ensuring artistic and aesthetic potential, and a comfortable and cosy stay of visitors in a green space. The research paper by G. Kothencz, T. Blaschke highlighted studies related to the hypothesis of perceived and spatial indicators of urban parks and found that the role of urban green spaces is fundamental in human perception of objective indicators of the environment [2].

Urban green spaces differ in size, quality, amenities, and entertainment resources in terms of their use, maintenance, and design quality. According to J. Wu, Z. Feng, Y. Peng, Q. Liu, & Q. He, this heterogeneity is related to the requirement that parks meet local standards [3]. R. Zhang, S. Peng, F. Sun, L. Deng, & Y. Che proposed a classification of parks in terms of environmental justice (for groups of the population with different socio-economic status and racial/ethnic composition in different countries), which combines accessibility, quality, aesthetic features, recreation facilities, and amenities [4].

Given the important role of urban green spaces, researchers pay great attention to their study. The authors of [5], investigating the system of green spaces in more than 1,000 cities, point out that scientific publications are limited to individual cities and give contradictory results due to the use of various data sources and methods. The modern world is working to expand a large-scale project that includes a detailed survey of all green spaces in megacities and the creation of a publicly accessible geographic database that documents all types, species, their quantity, and distribution [6]. Researchers also study the possibility of identifying vegetation in the city from satellite images in the optical range in order to establish the condition of garden and park objects and point out the accuracy and necessity of research data [7]. It is satellite data that will be used to determine the green potential of the city's space. In addition to planning documentation on the list and areas of public facilities, the authors of [8] point out the need for research that will be based on maps and will be able to show the relationship between built-up areas and green spaces.

Since the 2000s, there has been a massive demolition of green spaces in cities and localities of Ukraine, as a result of which the area of green spaces has significantly decreased, in particular, in Kyiv (in 1968, 24 m^2/ resident, now – 16-18 m^2/resident) [9]. The standard indicator for the area of urban landscaping established by the World Health Organization is 50 m^2 of urban green spaces per resident, and the indicator of public green spaces for large cities is 21 m^2 per person [9; 10]. A common category of urban public spaces is mini-parks, which in most cases are intended for transit traffic or short-term recreation.

According to V.Yu. Yukhnovskyi, O.V. Zibtseva, in 1984 significantly larger areas of parks were recommended in Ukraine – from 0.5 to 3.0 hectares. At the same time, in practice, deviations from the standards were allowed: parks had an area from 0.1-0.2 and up to 4-5 hectares. For example, the size of parks in Georgia ranges from 0.2 to 2-3 hectares, while in Moldova parks have an area of up to 3 hectares. According to the researcher, a 25-fold decrease in the minimum area of public gardens (compared to 1984) left a loophole, whereby small areas of street greenery are transferred to the category of public green spaces, which allows improving the indicator of public green space provision [11].

S.V. Rogovskiy, N.V. Krupa, who studied the mini-parks on Kontraktova Square, proposed an algorithm for the reconstruction of plantings on the territory of the park, namely: assessment of inventory results, sanitary logging; establishment of future compositions and engineering preparation; planting of plants and qualified care [12].

The green spaces of Rivne, including public gardens, were investigated by N.V. Denisyuk and V.Y. Melnyk. It was concluded that the distribution of public green spaces within the city is uneven, which, according to the researchers, is conditioned by the heterogeneity of growth conditions and the human factor [13].

In the city of Kyiv, according to the "Kyivzelenbud" municipal association, there are currently 618 parks [14]. In recent years, there has been a tendency to allocate areas for new parks by the decision of the city council. The study of these territories would establish their compliance with the generally accepted concept of "park" and state construction standards and provide meaningful recommendations for identifying these territories.

The purpose of the study was to investigate and analyse the current state, identify, and classify parks in the Sviatoshynskyi district of Kyiv.

Materials and Methods

The object of research is the territory of 63 parks in the Sviatoshynskyi district of Kyiv. Table 1 provides infor-

mation on the distribution of parks by the following criteria: address, area [15], year of establishment. For further classification and identification of experimental objects, each park was assigned an ordinal number.

Table 1. General characteristics of parks in the Sviatoshynskyi district of Kyiv

No.	Park name	Area, ha	Time of establishment
1	Park on Hnata Yury Str. and Lesia Kurbasa Ave.	0.67	2016
2	Park on Chaadayeva Str.	0.43	2016
3	Park on the corner of Lesia Kurbasa Ave. and H. Kosmosu Str.	1.32	2017
4	Park on the corner of Y. Kolasa Str. and R. Rollana Blv.	7.86	2017
5	Park on Tuluzy Str. 6-D	0.41	2017
6	Park on Korolyova Str.	1.17	2018
7	Park on V. Kuchera Str. (from the children's clinic to S. Sosninykh Str.)	0.5	2017
8	Park on Korolyova Str. (near "Smarahd" SE)	1.4	2016
9	Park on the corner of H. Barskoho Str. and Symyrenka Str.	0.86	2016
10	Park on Symyrenka Str. 22-24	2.4	2017
11	Park at the intersection of Kiltseva Road and Zodchykh Str. (along Vira lake)	3.7	2018
12	Park on Koltsova Ave. to Symyrenko juncture	0.16	2017
13	Park on Lesya Kurbasa Ave. near building No. 1-A	0.11	2017
14	Park along Korolyova Str. (adjacent to building No. 10 on Korolyova Str. and tram lines)	0.21	2017
15	Park between buildings No. 5-A and No. 7-A on Symyrenka Str.	0.95	2017
16	Park on Symyrenka Str. 13/1	0.25	2016
17	Park on Bulhakova Str. 12	0.23	2016
18	Park on Bulhakova Str. 9	0.37	2020
19	Park on Verkhovynna Str. 8-10	1.37	2017
20	Park on the corner of Peremohy Ave. and Kramskoho Str.	0.34	2017
21	Park near the administration on 97 Peremohy Ave.	1.91	2014
22	Park on Peremohy Ave. 117-119	1.24	2016
23	Park on Peremohy Ave. 121-123	0.46	2015
24	Park on the corner of Peremohy Ave. and Chornobylska Str.	1.15	2010
25	Park on Kiltseva Road	0.18	2015
26	Park on the corner of Lvivska Str, and Kramskoho Str.	0.21	2014
27	Park on Peremohy Str. 117 (near "Ekran" cinema theatre)	0.31	2012
28	Park on Verkhovynna Str. 80	0.46	2017
29	V. Stus Square (on the corner of Peremohy Ave. and Palladina Ave.)	1.06	2014
30	Park between Semashka Str. and Palladina Ave.	2.84	2019
31	Park on Kotelnikova Str. 26-32	3.15	2019
32	Park on Peremohy Ave. 131	0.77	2017
33	Park on Kramskoho Str. 10	1.3	2001
34	Park on Chornobylska Str. 12	0.65	2016
35	Park on Chornobylska Str. 4/56	0.46	2016
36	Park on Zhyvopysna Str. 12	0.17	2016
37	Park between Krasnova Str. and Semashka Str.	2.8	2017
38	Park near the monument to soldiers on Yefremova Str.	0.6	2018
39	Park on the corner of Yefremova Str. and Chornobylska Str. (near Afghanistan War Memorial)	0.2	2017
40	Park near School No. 304 on Pryluzhna Str.	0.81	2018
41	Park on Deputatska Str. 13-17	0.5	2017
42	Park between Palladina Ave. and buildings No. 87, 87-A and Vernadskoho Blvd.	0.52	2017
43	Park on Chornobylska Str. 24/26	1.01	2016

Table 1, Continued

No.	Park name	Area, ha	Time of establishment
44	Park on Pidlisna Str. 2	0.8	2018
45	Park on Bulakhovskoho Str. near buildings No. 40 and No. 42/43	0.35	2017
46	Park on Yefremova Str. near building No. 18	0.43	2018
47	Park on Pryluzhna Str. 2	0.78	2017
48	Park on Zodchykh Str. 36-38	0.42	2018
49	Park on Symyrenka Str. 27-29	0.53	2018
50	Park on Peremohy Ave. 144	0.4	2006
51	Park on Chornobylska 3	1.08	2017
52	Park on Peremohy Ave. 73-A	0.206	2018
53	Park on Irpinska Str. 63-A and F. Pushynoi Str. 44/50	0.8	2017
54	Park between buildings 7-A and 9-A on Tupoleva Str.	0.4	2017
55	Park between buildings No. 11 and 11-A on Tupoleva Str.	0.32	2006
56	Park between buildings No. 59 on Vernadskoho Blvd. and No. 2, 4 on Dobrokhotova Str.	0.4	2006
57	Park near buildings No. 8-A and 10 on Semashka Str.	0.8	2006
58	Park along buildings No. 81 and 85 on Vernadskoho Blvd.	0.6	2017
59	Park between buildings No. 11-D, 15-A, and 15-B on Tupoleva Str.	0.6	2019
60	Park between buildings No. 63-A and 71-A on Vernadskoho Blvd.	0.9	2017
61	Park on Naumova Str. 31-33	0.6	2018
62	Park on Rakhmaninova Str. 22	0.36	2018
63	Park on Lvivska Str. 3	1.8	2020

Source: [15]

Field studies were conducted during 2021-2022 using landscape and visual analysis. Research materials were obtained on the territory of the Sviatoshynskyi district of Kyiv by route and field survey of the park territories. A systematic approach and comparative analysis of factual material were applied. Regulatory data were analysed [16]. The species composition was determined using dendrological determinants [17; 18], and the species name – according to the international classification [19].

When processing the field survey materials, the analysis was used to summarise data on the area, configuration, and location of parks. The comparative method was used to group parks according to certain characteristics and summarise the information obtained based on professional literature and theoretical publications. General information about the objects of research was taken from literary sources [15], the year of creation of parks was specified from archival materials.

Results and Discussion

The park is an ordered and landscaped plot with an area of 0.02 ha to 2.0 ha, which is an element of architectural and artistic design of populated areas, intended for short-term recreation of the population [20].

According to modern standards [16], the park should occupy an area of 6 m^2 per person. According to regulatory data, green spaces should make up 65% of the total area of the park; paths, playgrounds, alleys – 30%; buildings and small architectural forms – 5% [16]. The elements of the arrangement of parks include small architectural forms: decorative fountains, active fountains, benches, and garden furniture [21]. The development of the classification of green spaces, in particular parks, is becoming increasingly important.

The Kyiv district under study is currently a cozy, albeit remote from the centre, residential area with excellent transportation and affordable housing. In this area there is a good transport interchange – there is a metro and a suburban railway station [14; 22].

According to their functional purpose, parks belong to public plantings, which, according to "Kyivzelenbud" municipal association in Sviatoshynskyi district, occupy 208.24 hectares [15], among them 6 parks with a total area of 59.42 hectares and 63 parks with an area of 59.42 hectares (Table 2).

Table 2. Registry of landscaping facilities of the public utility company for the maintenance of green spaces in the Sviatoshynskyi district as of 01.01.2020

Name	Value
Number of parks, units	63
Area, ha	59.4247
including the lawn, ha	48.8485
Trees, units	5,180
Bushes, units	11,768
Flower beds, m^2	1,815.6
Paths, m^2	32,066
Hedges, lm	1,613

Source: [15]

According to tabular data, a significant area within parks is occupied by lawns, more than 82%, the rest of the area is occupied by woody plants and paths (17) and a small percentage is accounted for by flower beds and hedges (0.5%). Considering the data for the Sviatoshynskyi district, it was established that public plantings cover an area of more than 208 hectares and account for less than 7 m^2 per inhabitant. That is why it is necessary to preserve existing plantings as much as possible, increase their area, and create new green spaces within the district.

According to field surveys and literature data [15], there are 63 parks in the Sviatoshynskyi district with a total area of 60.05 hectares, which is about 1% of the total area of the district. The area of parks is about 30% of all common plantings in this area of the city. In the course of research and field surveys, it was found that the submitted list of parks of the district is not exhaustive, since some green zones, under certain circumstances, have lost the status of a park, and some are only being established.

Parks located throughout the Sviatoshynskyi district have small areas from 0.11 to 7.86 ha. The smallest park is located on Lesya Kurbasa Ave. near building No. 1-A, and the largest – on the corner of Ya. Kolosa Str. and R. Rollana Blvd. It was established that the parks of the Sviatoshynskyi district with ordinal numbers 4, 10, 11, 30, 31, and 37 do not meet the established standards in terms of the area.

In the mid-19th century, there were no public gardens or landscaped parks for public use in Kyiv [21]. Parks of the Sviatoshynskyi district of Kyiv were created in 2006-2020 and can be divided into the latest and most modern ones by the time of creation. It was established that the majority of parks, namely 86%, were created in 2016-2020. According to Lviv researchers, most of the parks in Lviv were created in the second half of the 20th century, although a significant part of the parks can be considered new, which were created according to the developed projects in the context of city development plans [23].

Parks of the district perform several functions in accordance with their intended purpose and location, namely: for short-term recreation of citizens, transit, memorial function, for active recreation and sports (Table 3).

Table 3. Classification of parks in the Sviatoshynskyi district of Kyiv by functional purpose

Functional orientation of parks	Number of parks	Area, ha	Ordinal number of the park according to Table 1
Short-term recreation	44	48.26	2, 4-11, 13-15, 21, 23-25, 27, 30-37, 43-49, 52-63
Transit	13	8.24	1, 3, 12, 16-20, 22, 28, 40-42
Memorial	4	2.26	29, 38-39, 50
Sports	2	1.29	26, 51
Total	**63**	**60.05**	

Source: compiled by the authors

Thus, it was determined that 70% of the parks of the Sviatoshynskyi district are intended for short-term recreation, 21% – for transit traffic of pedestrians, 6% – memorial, and 3% – for active recreation and sports. The sports function is performed by two parks, namely: the park on the corner of Lvivska Str, and Kramskoho Str. (area 0.21 ha) and the park on Chornobylska Str., 3 (area 1.08 ha). The authors of

this study suggest that the number of the latter category of parks should be increased within the district.

Parks of the Sviatoshynskyi district are classified according to four characteristics, which, accordingly, are divided into groups and subgroups in even more detail:

1. *by place of creation:*
- within the residential area;
- near administrative buildings;
- along linear structures;
- on the streets.

2. *by appearance:*
- by size (area): small (up to 0.5 ha), medium (0.5-1.0 ha), and large (over 1 ha);
- by shape: rectangular, triangular, elongated, irregular;
- by planning structure: regular, landscape;
- by the preferred composition of plantings: coniferous, deciduous, mixed;
- by the presence of flower beds and hedges.

3. *by functional purpose:*
- transit;
- short-term recreation;
- memorial.

4. *by creation time:*
- latest (2006-2015);
- modern (2016-2020).

The natural and geographical affiliation of parks directly affects the development of plant communities and the species composition of green spaces [23; 24]. Classification of parks by location and place of creation is given in Table 1. Most of them (27 parks out of 63) are located on the streets of the district, their area is 23.65 hectares, which is 39.0% of the total area of parks in the Sviatoshynskyi district. Such type of location is observed in all megacities of Ukraine, which is conditioned by the creation of small buffer zones between the roadway and the residential area.

In terms of appearance, parks differ in their shape and size (Table 4), the species composition, and the planning structure. In the Sviatoshynskyi district, small parks (up to 0.5 hectares) predominate – 27 objects with a total area of 9.0 hectares, which is 15% of the total area of parks in the district. The small size of public parks is conditioned by the fact that in dense neighbourhoods only a small area is allocated for green spaces.

Table 4. Classification of parks of Sviatoshynskyi district by various criteria

Classification attribute	Classification group/ subgroup	Ordinal number of the park according to Table 1	Number of parks	Area, ha
By location	between the residential areas	15, 18, 42-43, 45-46, 53-60	14	8.45
	near administrative buildings	21	1	1.91
	along roads/tram tracks	1, 3, 11-14, 19-20, 22-25, 27, 29-30, 32, 38, 50	18	16.89
	on the streets	2, 5-10, 16-17, 26, 28, 31, 33-37, 39-41, 44, 47-49, 61-63	27	23.65
By appearance	By size small	2, 5, 7, 12-14, 16-18, 20, 23, 25-28, 35-36, 39, 45-46, 48, 50, 52, 54-56, 62	27	8.13
	medium	1, 9, 15, 32, 34, 38, 40-42, 44, 47, 49, 53, 57-61	18	12.74
	large	3, 4, 6, 8, 10-11, 19, 21-22, 24, 29-31, 33, 37, 43, 51, 63	18	38.56
	By shape: triangular	8, 9, 18, 29, 38	5	3.92
	rectangular	3, 5, 14, 19-21, 23, 24, 26, 30-32, 36, 39-41, 44, 46, 50, 51, 54-56, 59, 60	25	21.15
	elongated	1, 4, 6, 7, 10-12, 22, 25, 27, 35, 42, 48, 52, 58, 63	16	22.20
	irregular shape	2, 13, 15-17, 33, 34, 37, 43, 45, 47, 49, 53, 57, 61, 62	16	11.95
	By the composition of plantings: deciduous	2, 5, 6, 8-11, 13-19, 25, 26, 30, 33, 37, 39, 41, 42, 46-49	29	24.57
	coniferous	22-24, 27, 31, 32, 34-36, 40, 43, 44, 50, 52, 53	15	12.31
	mixed	1, 3, 4, 7, 20-22, 28, 29, 45, 54-63	20	22.49
	By the presence of flower beds	9-11, 18, 20, 21, 24, 26, 29, 33-35, 37-40, 43, 44	18	20.63
	By the presence of hedges	4, 8, 14, 19, 21, 24, 26, 29-31, 33, 34, 48	13	23.53
By creation time	latest (2006-2015)	21, 23-27, 29, 33, 50, 55-57	12	8.50
	modern (2016-2020)	1-20, 22, 28, 30-32, 34-49, 51-54, 58-63	61	40.52

Source: compiled by the authors

The shape is dominated by rectangular parks, the total area of which is 21.0 hectares or 35% of the total area of parks in the Sviatoshynskyi district. Using GIS methods, when surveying urban areas, it was found that a high coefficient of green areas is associated with the creation of so-called "green wedges". With this method of gardening and careful care it is possible to adapt urban greenery to difficult urban conditions [25].

In contrast to Lviv parks, where mixed plantings predominate [23], Sviatoshynskyi district has 40% of parks (from the total area of the district's parks), with a total area of 24 hectares, which are dominated by deciduous plant species. The most common types of ornamental plants are: Norway maple (*Acer platanoides* L.), small-leaved linden (*Tilia cordata* L.), horse chestnut (*Aesculus hippocastanum* L.), black poplar (*Populus nigra* L.) black locust (*Robinia pseudoacacia* L.), mountain ash (*Sorbus aucuparia* L.), white poplar (*Populus alba* L.), silver birch (*Betula pendula* L.), white willow (*Salix alba* L.), southern catalpa (*Catalpa bignonioides* L.), Siberian peashrub (*Caragana arborescens* L.), white mulberry (*Morus alba* L.), cherry plum (*Prunus cerasifera `Pissardii`* L.), varnish tree (*Ailanthus altissima* L.), common beech (*Fagus sylvatica* L.), common hornbeam (*Carpinus betulus* L.), common oak (*Quercus robur* L.), common ash (*Fraxinus excelsior* L.), staghorn sumac (*Rhus typhina* L.), Chinese elm (*Ulmus parvifolia* L.), myrobalan plum (*Prunus divaricata* L.), eastern redbud (*Cercis canadensis* L.), London planetree (*Platanus × acerifolia* L.), common apricot (*Prunus armeniaca* L.), Japanese maple (*Acer palmatum* L.).

The size of plants determines the architectural and planning solution of such small areas of short-term recreation as parks [26; 27]. Among the types of plantings in parks, the most common are single plantings of Norway maple (*Acer platanoides* L.), mountain ash (*Sorbus aucuparia* L.), white willow (*Salix alba* L.), white mulberry (*Morus alba* L.), London planetree (*Platanus×acerifolia* L.), Scots pine (*Pinus sylvestris* L.), and common oak (*Quercus robur* L.). Such an assortment of plants is explained by the fact that parks were created within territories where plants were already planted, which were later left as single plantings or compositional accents on a certain territory.

Within the limits of row plantings, the most commonly used conifers are common spruce (*Picea abies* L.), from deciduous – Norway maple (*Acer platanoides* L.), white poplar (*Populus alba* L.), black poplar (*Populus nigra* L.), and small-leaved linden (*Tilia cordata* L.).

For group plantings, the most decorative range of plants is used. Usually these are plants or their cultivars which differ in special or characteristic decorative qualities: the colour and texture of the stem, the architectonics of the crown, the colour of the leaf surface in different seasons, flowering, etc. Among them, the most common are cherry plum (*Prunus cerasifera `Pissardii`*), blue spruce (*Picea pungens `Glauca`*), Japanese spiraea (*Spiraea japonica `Gold`*), savin juniper (*Juniperus sabina* L.), eastern redbud (*Cercis canadensis* L.), staghorn sumac (*Rhus typhina* L.), Japanese maple (*Acer palmatum* L.) etc.

Alley plantings, within parks, are most often created from Norway maple (*Acer platanoides* L.).

On 18 objects under study, which cover an area of 20.63 hectares and make up 32% of the total area of parks in the Sviatoshynskyi district, flower beds were observed, which are overwhelmingly created from annual flowers. Hedges were observed in 13 parks, which have an area of 23.53 hectares, which is 39% of the total area of parks in the Sviatoshynskyi district. It was also found that in the considered parks, hedges were created from common hornbeam (*Carpinus betulus* L.), common privet (*Ligustrum vulgare* L.), evergreen boxwood (*Buxus sempervirens* L.) and Siberian dogwood (*Cornus alba* L.)

Comparing the recommended areas of the territories of parks in Georgia, Moldova [11], and Ukraine [21; 23; 24], it is necessary to point out the difference in the minimum areas according to regulatory documents which allows identifying individual areas for public plantings, in particular in the Sviatoshynskyi district of Kyiv. According to H.Y. Hryn and Y.V. Henyk, Lviv's parks cover an area of 0.060-2.404 hectares and are dominated by small parks, which is similar to the parks of the Sviatoshynskyi district of Kyiv.

N.V Denysiuk distinguished 39 public gardens in Rivne with a total area of about 43 hectares. According to their location in urban areas, the parks of Rivne are divided into two groups: parks on squares and parks on streets [13]. Regarding the parks of Lviv, the researchers note that the most represented parks are located along the streets (47%) [23]. For the studied parks of Kyiv, a similar pattern has been established, which calls for further reflection on increasing the number of parks with a different location. The difference is that a significant number of parks in Lviv are located inside residential buildings, and in the Sviatoshynskyi district there are fewer parks with this location.

Analysing studies on the range of plants on the territory of parks [12; 13; 23] and comparing them with the findings of this study, there is an advantage of local dendroflora, considering the ecological and biological characteristics of plants. It is also necessary to increase the number of coniferous plants, hedges, and flower arrangements.

Considering the modern "classification of green spaces" or in some post-Soviet countries "classification of green areas", which have similar categories, the territories of parks are classified as public spaces. But the classification of parks is not a subject of discussion in modern scientific publications, since these parks are quite small in area, created on plots that are not used for construction, and do not have a special concept and architectural plan. But the main stage on the way to urban comfort is the planning of an effective system of urban improvement, including the development of a system of landscaping of the territory, and their classification by the level of landscaping [28]. Analysis of the classification of public parks allows systematising the generalised information on the studied territories and developing perspective plans for improving their organisation within the Sviatoshynskyi district of Kyiv.

Conclusions

Parks of the Sviatoshynskyi district and other green spaces of the city perform important environmental and nature protection functions, form a special microclimate, and provide a favourable human habitat.

Parks are classified according to the following criteria: appearance, location, functions, and time of creation. Classification features were divided into groups and subgroups, respectively.

According to the place of creation, the largest number of parks was found along streets and squares. In terms of shape, they are dominated by parks of rectangular shape and small area, up to 0.5 hectares, and the composition of plantings is deciduous. Parks of the Sviatoshynskyi district mainly perform several functions in accordance with their intended purpose. Most of the parks in the city perform transit and recreation functions and were created mainly in 2016-2020. Deciduous plant species predominate in the plantings of parks. In the last decade, the dendroflora of the objects under study has significantly expanded due to introduced and exotic plants. Among the types of plantings, the most represented are row and group plantings of trees and shrubs. The most common plant species are Norway maple (*Acer platanoides* L.), white poplar (*Populus alba* L.), black poplar (*Populus nigra* L.), small-leaved linden (*Tilia cordata* L.) black locust (*Robinia pseudoacacia* L.), horse chestnut (*Aesculus hippocastanum* L.), Scots pine (*Pinus sylvestris* L.), European box (*Buxus sempervirens* L.), European elderberry (*Sambucus nigra* L.), Siberian dogwood (*Cornus alba* L.), common privet (*Ligustrum vulgare* L.). About a third of parks have flower beds, and 13 parks (21%) have hedges.

The developed classification of city parks would allow more effectively to analyse the species, age, and spatial structures of plant communities in urban ecosystems, developing productive and aesthetically attractive green zones in an urbanised environment, and surveying the inventory of plantings of the complex green zone of the district.

Thus, after analysing the laws and regulations of Ukraine, it can be concluded that 6 parks of the Sviatoshynskyi district (ordinal numbers 4, 10, 11, 30, 31, 37) do not meet the established standards regarding the minimum area, and there is an insufficient number of sports-type parks. Further study will be aimed at the investigation of the features of park reconstruction, depending on the classification group.

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Сучасний стан скверів Святошинського району м. Києва

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Анотація. В питанні стратегії озеленення Києва, відмічено збільшення кількості скверів у кожному районі міста, проте їх доцільність не завжди обґрунтована. Саме тому метою статті було висвітлення ролі скверів в урбанізованому середовищі, аналіз нормативних показників. Польові дослідження проводилися упродовж 2021-22 рр. методом ландшафтно-візуального аналізу. У процесі наукового пошуку було застосовано теоретичні методи дослідження, методи аналізу, синтезу, порівняння, маршрутно-рекогносцирувальні, математичні, порівняльні методи та узагальнення отриманої інформації на основі фахової літератури й теоретичних публікацій. Проведений аналіз кількісних показників насаджень загального користування в межах скверів Святошинського району м. Києва. Встановлено фактичну кількість скверів, їх площ та основні результати досліджень скверів. Було складено повний перелік скверів із зазначенням площі, року створення і місця розташування в районі. За натурними дослідженнями та картографічними матеріалами класифіковано сквери за візуальними ознаками. Визначено розміри, площі, форми, планування та склад насаджень на дослідних об'єктах. Проведена класифікація за функціями: транзитні, відпочинкові, меморіальні, а також за часом створення. Встановлено, що 70 % скверів району призначені для короткочасного відпочинку, а за місцем створення найбільша кількість скверів розташованих вздовж вулиць (39 % загальної площі скверів району). Визначено, що території скверів Святошинського району займають невеликі площі (від 0,11 до 7,86 га) та розташовані рівномірно по всьому району. З'ясовано, що за формою у місті переважають сквери прямокутної конфігурації – 35 % за площею, а за зовнішнім виглядом – сквери малої площі (до 0,5 га). За складом насаджень домінують сквери з перевагою листяних видів (40 %). Визначено, що за функціональним призначенням більшість скверів виконують функцію короткочасного відпочинку, а за часом створення переважна частина скверів сформована в 2016-2020 рр. Подана класифікація дозволить систематизувати існуючі території та розробити номенклатуру скверів Святошинського району м. Києва

Ключові слова: класифікація скверів, зелені насадження, асортимент рослин, міські екосистеми, живоплоти