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RESEARCH ARTICLE

Sharivskyi Park (Kharkiv region, Ukraine): history and monitoring research during 1997–2018

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Abstract

Changes in the taxonomic composition, landscapes, and plantations of the ancient Sharivskyi Park (Kharkiv region, Ukraine) were studied according to the literature and the results of our own monitoring research conducted in 1997 and 2016–2018. It was found that the number of species and cultivars decreased between the studies, but not significantly (the rate of decline in taxonomic diversity slowed down because due to a long period of inadequate care, only the most resistant species remained in the park). There was an almost complete loss of *Picea abies* plantations, which occupied 2.3 ha (7.9 % of the green area) in 1997. In most of Sharivskyi Park, the park landscape was replaced with a forest type. Garden and meadow landscapes are disappearing in the park. The Oak grove of Sharivsky Park, which represented the park type of the landscape, is degrading; it was replaced by derivative plantations that form the forest type of landscape. Forest-type areas of the oak grove appeared to be stable; degradation does not occur in them. Restoration of the degraded oak grove is possible only if the existing derivative plantations are removed, which is currently prohibited by law (therefore, changes in legislation are required), and artificial planting of oaks.

Keywords: ancient park, Kharkiv region, changes, taxonomic composition, landscapes, plantings, restoration

Authors' contributions: Grigorenko Alla participated in the surveys of the park in 2016–2018, compiled species lists, and worked on the discussion of materials and formulation of conclusions. Klimenko Yurii conducted research in 1997, participated in the research of 2016–2018, made drawings, and worked on the discussion of materials and formulation of conclusions.

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Introduction

Conservation of historical and cultural heritage is crucial for the state and society. Part of this heritage are the parks-monuments of landscape art (PMLAs). They suffer especially badly during wars, some due to direct influence and others due to lack of care. Therefore, after the end of hostilities, PMLAs require a period of recovery. At the same

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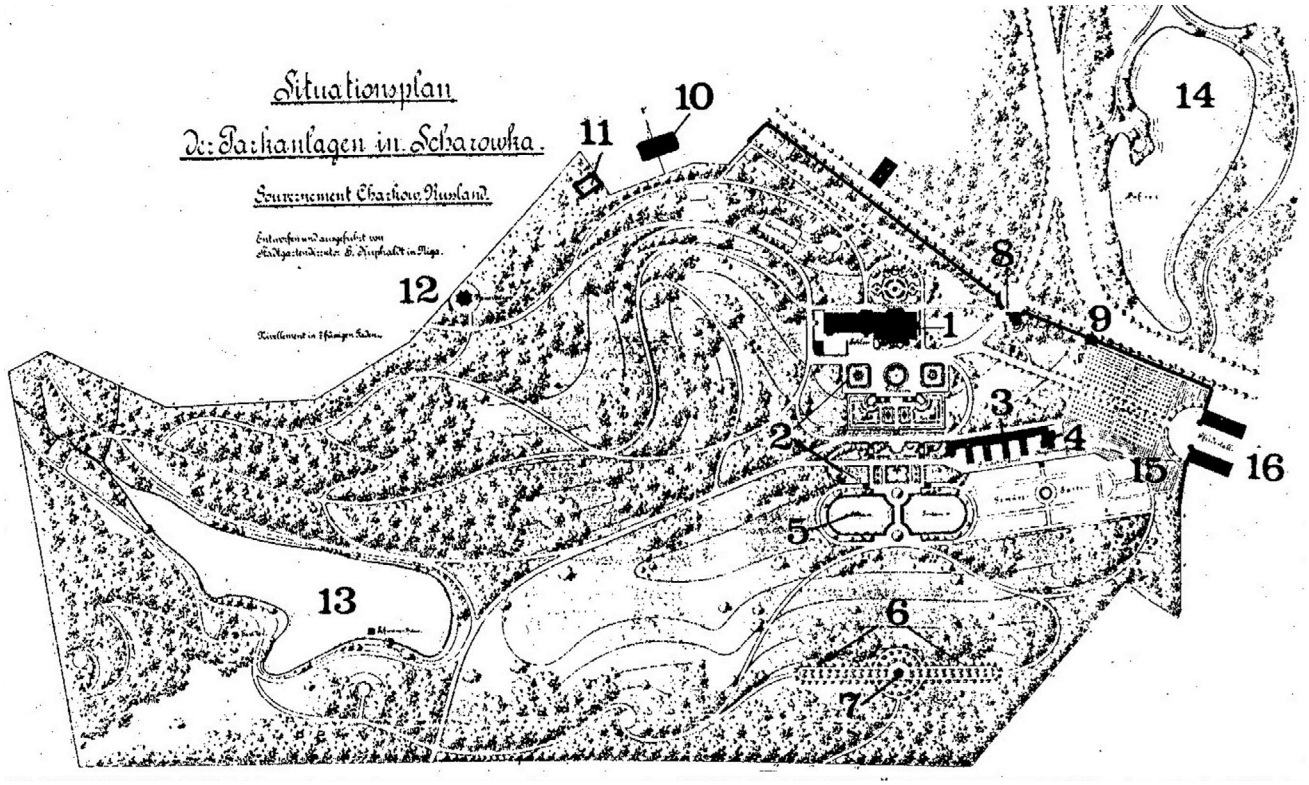

Figure 1. Original Georg Kuphaldt's plan of reconstruction of Sharivskyi Park (1901): **1** – palace; **2** – terraces; **3** – greenhouses; **4** – gardener's house; **5** – swimming pool; **6** – promenade; **7** – pavilion "Glorieta" (unbuilt); **8** – main gate with a guardhouse; **9** – gate; **10** – manor church, **11** – family cemetery; **12** – pheasant; **13** – great pond; **14** - palace pond; **15** – acclimatization garden; **16** – carriage house.

time, recovery works should have a scientific background. For this reason, it is necessary to have cartographic, iconographic, and literature sources describing PMLAs in periods of their prosperity, and to analyze surveys conducted in different years by specialists (especially if these surveys were performed within a specific time interval by the same method). Information accumulated in this way allows identifying changes and transformation trends in taxonomic composition, landscapes, and plantations of PMLAs.

Sharivskyi Park is a PMLA of national importance. It is scattered on the slopes of the arroyo near Sharivka urban-type settlement (Bohodukhiv district, Kharkiv region, Ukraine). The elevation there varies from 132 m to 173 m a.s.l. The park imperceptibly turns into a forest in the northwest, west, and south.

The owners of the estate who took care of the park (currently Sharivskyi Park) were: until 1869 – Piotr Olkhovsky, in 1869–1894 – Gebenshtrain brothers, in 1894–1903 – Leopold Koenig, until 1917 – Koenig's sons, in particular Julius Koenig (Anonymous, 1915; Lukomskyi, 1917; Volodarsky & Timokhin, 1967; Zharikov, 1986; Sappa, 1987; Borodulin et al., 1988; Mayak & Cherkasova, 1989; Kryvenko, 1996; Rodichkina, 1998; Rodichkin & Rodichkina, 2005; Alokhin et al., 2009). In 1901–1903 a famous park builder Georg Kuphaldt reconstructed the park (Fig. 1). From 1925 the palace housed a tuberculosis sanatorium, which closed in 2008. After that, the estate was turned into a touristic facility. Due to lack of financial support, the park was partly abandoned, which resulted in a dramatic changes in its vegetation composition.

Therefore, this work was aimed to establish trends in changes in planning, taxonomic composition, landscapes, and plantations of Sharivskyi Park (Kharkiv region, Ukraine) over a short period of about 20 years.

Material and methods

The first survey in Sharivskyi Park was conducted in 1997 by Yurii Klymenko, and later the park exploration was repeated in 2016 and 2018 by Yurii Klymenko and Alla Hryhorenko. The research was conducted before the

Russian-Ukrainian war. Unfortunately, we do not know the park's current condition, but we hope that the materials we have collected and the patterns we have discovered will one day help to restore one of the best park ensembles in Ukraine.

Species and cultivars composition in Sharivskyi Park was determined during the route surveys. The plant names are given following WFO (2022) taxonomy. Measurements (trunk diameter, tree height, crown diameter) were made for most age-old oaks and some other trees; their location was indicated on the plan. Six landscape types were determined according to the classification by Rubtsov (1956, 1979): forest, park, meadow, garden, regular, and alpine. Landscape plans were prepared; areas occupied by each landscape type were calculated using ArcView GIS 3.2a. For the analysis of plantations, according to the improved forest management method (Klymenko, 2012), the park's territory was divided into allotments according to the predominant species.

Results and discussion

There is no clear border between the park and the forest. Therefore in many works, it is indicated that the estate area is 70 ha (Lypa, 1960; Kokhno et al., 1975; Kosarevskyi, 1977; Kryvenko, 1996). According to official data (Mayak & Cherkasova, 1989), the current park area is 39.5 ha. However, our calculations on the plan obtained from the Cartographic Fund of Ukraine (1:10,000) resulted in 34.0 ha (Table 1). The difference of 5.5 ha can be explained by the fact that the park's boundaries were interpreted differently, based primarily on Mayak & Cherkasova (1989), who published the park's plan. The large pond in the park has an area of 1.30 ha and the smaller pond with a bridge is 0.20 ha.

In 1997 the estate appeared in poor condition. Due to a malfunction of the drainage system, the terraces began to collapse. The greenhouses turned into ruins. Pheasant pavilions were not used and their doors were clogged. The fountains did not work. The lindens on the promenade had not been cut for decades, and they had many long vertical trunks. Some paths disappeared and self-seedlings appeared on the meadows. In general 1650 m of paths (from the total of 9450 m) had disappeared and only 180 m of new paths had appeared.

The park is located in Zmiev-Valkiv-Dergachiv geobotanical region of the Kharkiv district of the Central Russian forest subprovince of the Eastern European province of the European-Siberian forest-steppe region. This area is characterized by linden-oak, oak (maple-linden-oak forests occupy smaller areas), oak-pine forests (on the terraces), floodplain meadows, and meadow steppes on chernozems. The description from 1913 (Orlov, 1913) testifies that the park was created based on maple-linden-oak hazel-hairy sedge forest (*Tilieto* (*cordatae*) – *Acereto* (*platanoidis*) – *Quercetum* (*roboris*) *coryloso* (*avellanae*) – *caricosum* (*pilosae*)). In the past, almost the entire territory was covered with forests destroyed in the XIX century (Barbarych, 1977). We believe that when Georg Kuphaldt was working on the formation of the park, oaks occupied almost the entire territory. Then oaks were partly thinned and spruces and other conifers were planted in some areas.

After 1917, the care of the park became insufficient and oaks in the landscape began to disappear. Probably many of them were cut down during the Civil War or WWII and after it. Thus, in the park appeared open ecological niches occupied by *Fraxinus excelsior* L., *Acer platanoides* L., and *Robinia pseudoacacia* L., and allotments with none dominated species were formed. Initially, a sparse understory was formed under the sparse oak forests. As the oaks were eliminated, the number of plants in the understory and their size increased, so the understory layer became the main one. A small number of old trees remained over this layer, but they did not form a joint canopy.

Over 100 species and cultivars of trees and shrubs were reported to be present in the park in 1939 (Lypa, 1960). Later, in 1959, 120 species and cultivars were registered there (Kurdyuk, 1965). Some other numbers are also occasionally reported. In particular, Borodulin et al. (1988) discovered 200 species (including 150 exotic) in the park. However, Borodulin et al. (1988) are not dendrologists and it is unclear how they obtained such a huge number. In 1997, one of us (Yurii Klymenko) identified 63 species and cultivars of trees, semi-shrubs, and vines belonging to 40 genera of 19 families. One species was represented

exclusively by a cultivar (i.e., *Picea pungens* Engelm. 'Kosteriana'), and three species had both natural representatives and cultivars (i.e., *Acer platanoides* 'Schwedleri', *Quercus robur* L. 'Fastigiata', and *Salix alba* L. 'Vitellina Pendula'). The division Pinophyta was represented by 11 tree species, Magnoliophyta – by 49 species (29 trees, 15 shrubs, four semi-shrub, and one liana species).

Among the most interesting conifers of the park were *Juniperus virginiana* L., *Larix decidua* Mill., *Picea engelmannii* Engelm, *P. glauca* (Moench.) Voss., *P. pungens* 'Kosteriana', *Pinus nigra* J.F. Arnold, *P. strobus* L., *Pseudotsuga mensiesii* (Mirb.) Franco, and *Thuja occidentalis* L. The plans that were grown at the beginning of the XX century became very tall. Even *Thuja occidentalis*, *Picea glauca*, and *Juniperus virginiana* had 28–32 cm trunk diameter. *Larix decidua*, *Picea abies* (L.) H. Karst., *Pinus nigra*, *P. strobus*, and *Pseudotsuga mensiesii* had a trunk diameters of 60–76 cm, while particular trees reached 30 m of height. There was a *Quercus robur* tree with a trunk of 2.1 m in diameter among the broadleaved trees. Some *Q. robur* 'Fastigiata' trees grew on the terraces. Old trees of *Aesculus hippocastanum* L., *Fraxinus excelsior*, *Gleditsia triacanthos* L., *Quercus rubra* L., *Phellodendron amurense* Rupr. also appeared in the park in 1997. Some trees had a crown diameter of 28 m, which means they grew lonely in open spaces before. In particular, Lypa (1960) mentions that Georg Kuphaldt used the principle of big open glades with pure or mixed groups and solitaires located on them during the park's creation. Near the forest, such groups gradually integrated into it. So, these plantations were constructed to be similar to the parks in Great Britain, representing the park type of landscape.

Many species reported to be in Sharivskyi Park in the past were not found there in 1997. In particular, in 1959, *Abies concolor* (Gordon) Lindl. ex Hildebr., *A. sibirica* Ledeb., *Aesculus pavia* L., *Celtis occidentallis* L., *Prunus virginiana* L., and *Quercus palustris* Münchh were reported to be in Sharivskyi Park (Kurdyuk, 1965). Additionally, in 1972 *Aesculus glabra* Willd., *Prunus serotina* Ehrh., *Symphoricarpos albus* (L.) S.F. Blake, and *Viburnum lentago* L. were mentioned to be present on the park area (Kokhno et al., 1975).

Table 1. Different areas of the Sharivskyi Park.

Areas	Year			
	1997		2018	
	ha	%	ha	%
Buildings	0.75	2.2	0.75	2.2
Water reservoirs	1.50	4.4	1.50	4.4
Arable lands	0.10	0.3	0.00	0.0
Roads, paths and platforms	2.50	7.4	2.20	6.5
Green zone	29.15	85.7	29.55	86.9
Total	34.00	100.0	34.00	100.0

Marchuk (2006) listed 81 arboreal trees in Sharivskyi Park. This number is much higher from what we registered in 1997 and is primarily related to the mention of singular examples (e.g., *Berberis francisci-ferdinandi* C.K. Schneid., *Crataegus succulenta* Schrad. ex Link., *Euonimus maackii* Rupr., *Philadelphus gordonianus* Lindl., *P. grandiflorus* Willd., *Rosa marginata* Walr., and *Spiraea flexuoisa* Rchb.). After inventory in 2018, we still have not found some species mentioned by Marchuk (2006).

As we found in 2018, after several dry years since 1997, plantations of *Picea abies* (L.) H. Karst. were damaged by European spruce bark beetle and only some trees survived. Since 1997, taxonomic degradation of plantations has occurred (Klymenko, 2012). Such species as *Picea engelmannii*, *P. glauca*, *Pinus strobus*, and *Phellodendron amurense* completely disappeared. Instead, less valuable species (e.g., *Platycladus orientalis* (L.) Franco and *Buxus sempervirens* L.) appeared there. General changes in the park landscape structure are represented on Figs. 2 & 3 and in Table 2.

In 1997, in Sharivskyi Park, the forest type of landscape was predominant and covered 81% of the total green area (Table 2). Thus, most of the park landscapes formed by Georg Kuphaldt had already been replaced by forests. From 1997 to 2018, areas with *Picea abies* were almost completely lost. Due to the ban on sanitary felling, in 2018, many dead trees remained standing (mostly *Picea abies*, but also *Thuja occidentalis*, *Quercus robur*, etc.), and some of the dead trees fell. Self-seedling aboriginal species of trees and bushes appeared in areas with dry spruce snags and fallen trunks,

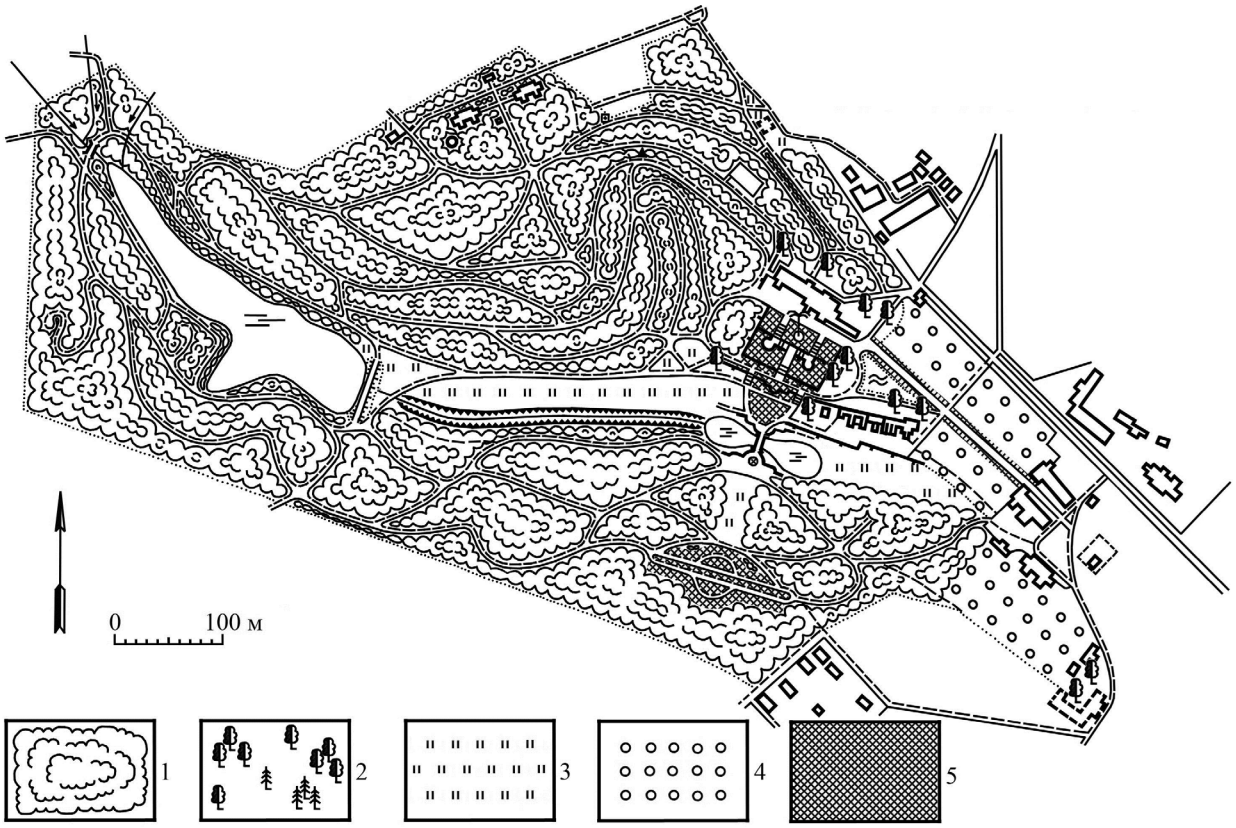

Figure 2. Landscape plan of Sharivskyi Park (1997). Types of landscapes: **1** – forest; **2** – park; **3** – meadow; **4** – garden; **5** – regular and its elements.

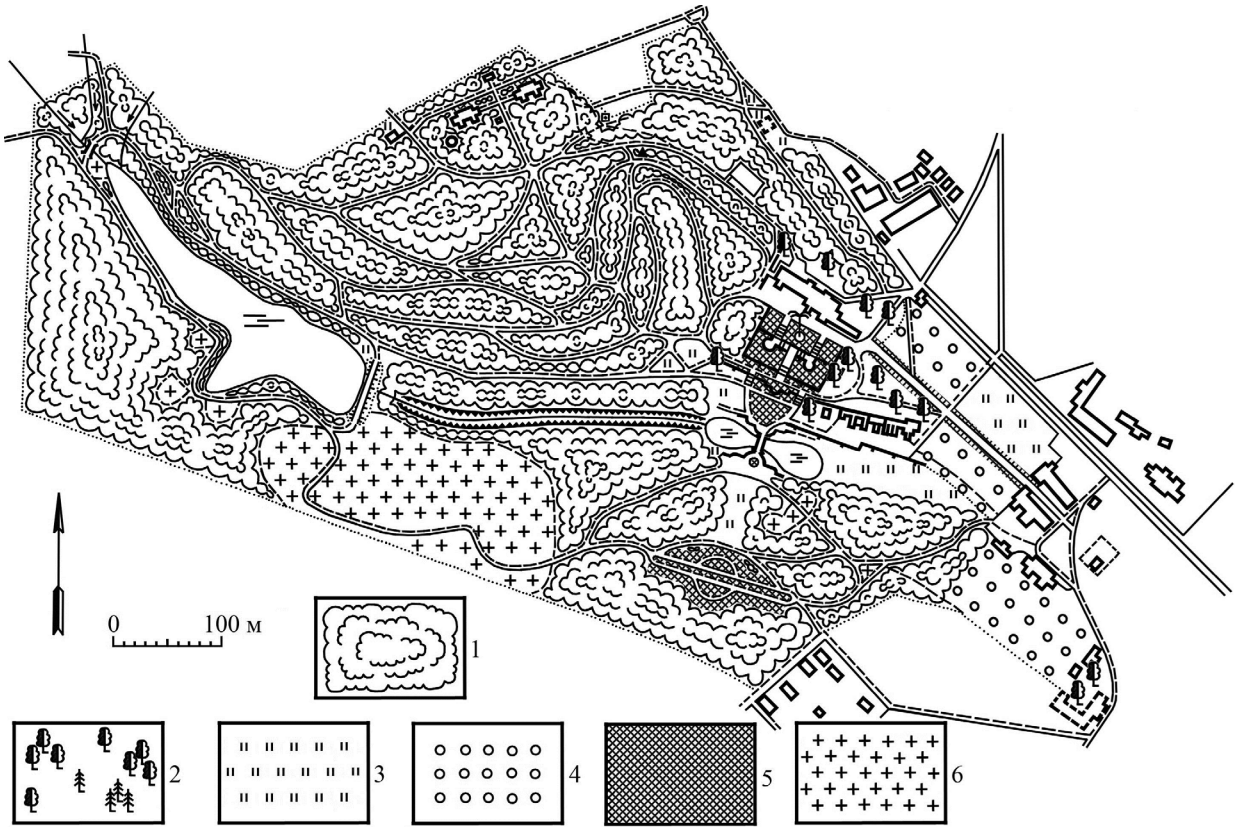

Figure 3. Landscape plan of Sharivskyi Park (2018). Types of landscapes: **1** – forest; **2** – park; **3** – meadow; **4** – garden; **5** – regular and its elements; **6** – areas with withered spruce.

Table 2. Distribution of the green areas of Sharivskyi Park by landscape types.

Landscape types	Year			
	1997		2018	
	ha	%	ha	%
Forest	23.6	81.0	22.35	75.6
Park	0.55	1.9	0.65	2.2
Meadow	2.15	7.4	1.25	4.2
Garden	2.05	7.0	1.65	5.6
Regular	0.80	2.7	0.80	2.7
Areas with withered spruce	-	-	2.85	9.7
Total	29.15	100.0	29.55	100.0

forming thickets. Some of the trunks fell on the surrounding areas. The total area of such cluttered thickets reached 2.85 ha. There is no need to distinguish separated landscape type for the areas with withered spruce snags because it is not typical for parks and gardens and is instead a temporary occurrence. We separated these areas only to demonstrate the scale of the disaster.

On the declivous sunny slope of the lower terrace an immaculate gardens farm was located with a greenhouse, a gardener's house, a garden, and an orchard. Peaches, apricots, and grapes were planted along the walls of the terrace. Today these gardens are neglected, not maintained, and some are overgrown with self-seedling forest species. All fruit trees were uprooted in a part of the garden and the area was covered with a lawn. However, in other places, many meadows that stopped being mowed overgrew with trees and shrubs and became a forest. Thus, the area of the garden and meadow types of landscapes has decreased, which can be considered landscape degradation (Klymenko, 2012).

The area of allotments with dominating *Quercus robur*, *Fraxinus excelsior*, *Acer platanoides*, and *Robinia pseudoacacia* has not changed significantly in 20 years (Figs. 4 & 5; Table 3). They each increased their occupied area by five hundred square meters at the expense of disappearing paths. The main changes were related to the death of spruces from the bark beetle. From 1998 till 2018, 25 age-old oaks had also withered. There were only 79 oak trees left outside the oak grove, one of which was almost dead. So in 20 years, nearly a quarter of singular oaks had died. Should the withering rate remain the same, singular age-old oaks will disappear in the park within the next 60 years. At the same time, the area of the overgrown thickets became more extensive because they absorbed the adjacent allotments in which none of the species predominated. The area of allotments in which none of the species predominated had increased due to the overgrowth of meadows and glades by the self-seedling of various arboreal species.

We can assume that there were meadows along the stream for a long time. However, in 1998, a young plantation of *Salix alba* had already been formed along the stream. Hence, the meadows' overgrowing had been going on for many years. In 2018, the thickets entirely covered the northern part of the stream. Only the area below the pond over which the bridge was built remained to be a meadow.

On the southern shore of the great pond there is an area with a dense canopy and the dominance of *Quercus robur* in the overstory layer. This area has a typical natural oak structure of layers and a rich grass cover with a predominance of *Carex pilosa* Scop. and a presence of *Asarum europaeum* L. and other oak-forest species. Such species as *Ulmus laevis* Pall., *U. glabra* Huds., *Acer platanoides*, *A. negundo* L., *Fraxinus excelsior*, *Robinia pseudoacacia*, and *Sambucus nigra* L. do not break through to this area. We have selected a test plot of 0.25 ha in this area and performed a complete tree trunk counting (Table 4).

Why did the thickets form in one part of the park and not in the other? Obviously, the reason is the density of *Quercus robur* layer. At the test plot, the density of the oak layer was 0.8–0.9 (104 trees per 1 ha). In those areas where *Fraxinus excelsior*, *Acer platanoides*, and *Robinia pseudoacacia* formed thickets and in areas where none of the species predominates, the density of *Quercus robur* layer was minimal. Such areas had 14.6 ha in total and hosted 79 oaks only (5–6 oaks per 1 ha). This allowed the replacement of the initial oak plantations with the derivatives during phytocoenotic degradation (Klymenko, 2012). Such areas have dead ground cover under the crowns and weed cover in the canopy windows. Interestingly, according to previous

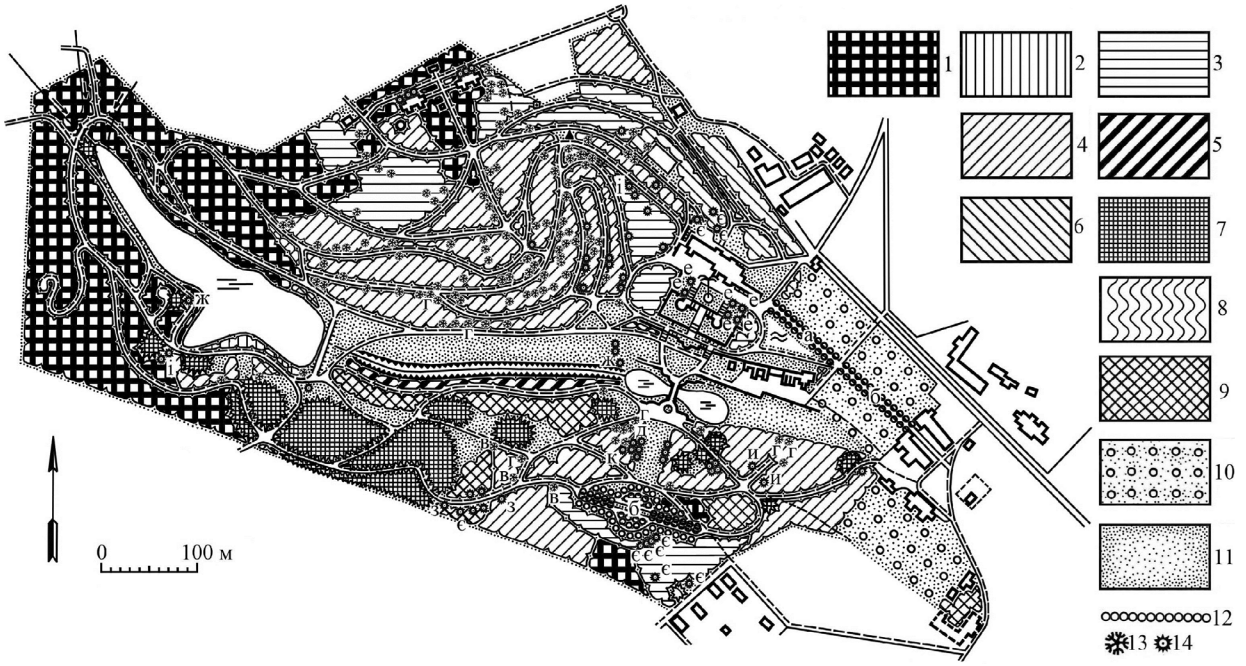

Figure 4. Plantings plan of Sharivskyi Park (1997): **1** – *Quercus robur*; **2** – *Tilia cordata*; **3** – *Fraxinus excelsior*; **4** – *Acer platanoides*; **5** – *Salix alba*; **6** – *Robinia pseudoacacia*; **7** – *Picea abies*; **8** – *Pinus nigra*; **9** – allotments in which none of the species predominates; **10** – orchard; **11** – glades and meadows; **12** – row of deciduous trees (**а** – *Aesculus hippocastanum*, **б** – *Tilia cordata*); **13** – individual deciduous tree (**unmarked** – *Quercus robur*, **в** – *Fraxinus excelsior*, **г** – *Acer platanoides*, **д** – *Acer campestre*); **14** – individual coniferous tree (**unmarked** – *Picea abies*, **е** – *Picea pungens* 'Kosteriana', **є** – *Pinus sylvestris*, **ж** – *Pinus nigra*, **з** – *Larix decidua*, **и** – *Pseudotsuga menziesii*, **і** – *Juniperus virginiana*, **к** – *Thuja occidentalis*).

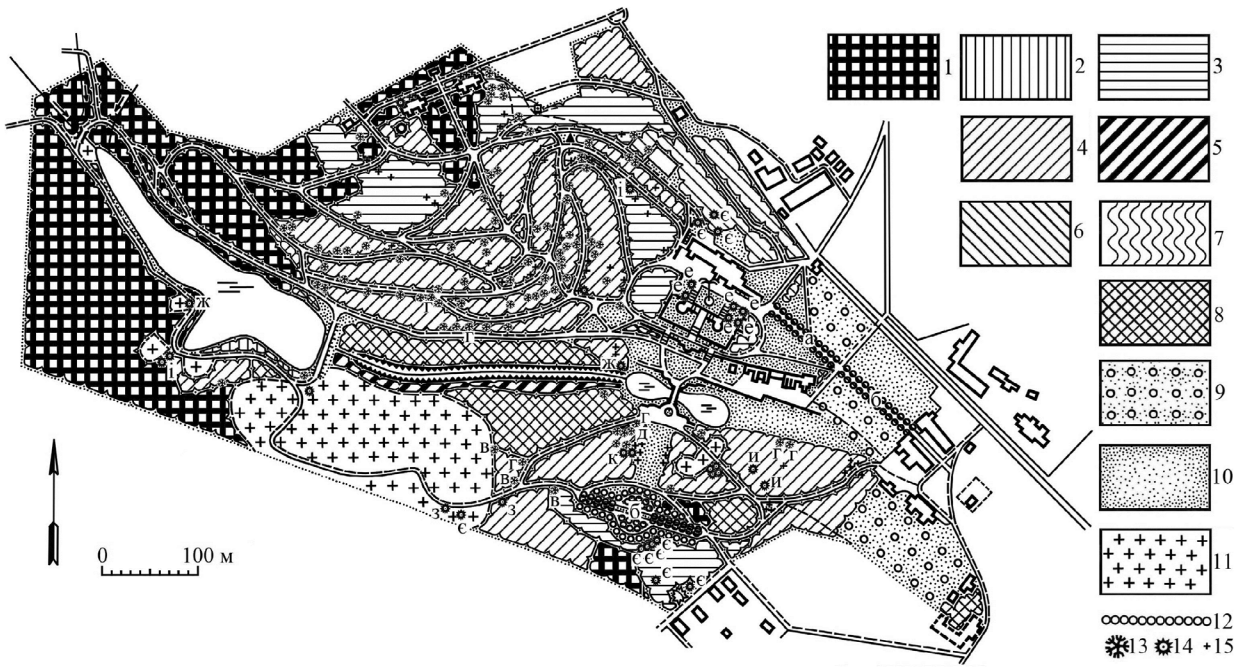

Figure 5. Plantings plan of Sharivskyi Park (2018): **1** – *Quercus robur*; **2** – *Tilia cordata*; **3** – *Fraxinus excelsior*; **4** – *Acer platanoides*; **5** – *Salix alba*; **6** – *Robinia pseudoacacia*; **7** – *Pinus nigra*; **8** – allotments in which none of the species predominates; **9** – orchard; **10** – glades and meadows; **11** – area with withered Picea abies; **12** – row of deciduous trees (**а** – *Aesculus hippocastanum*, **б** – *Tilia cordata*); **13** – individual deciduous tree (**unmarked** – *Quercus robur*, **в** – *Fraxinus excelsior*, **г** – *Acer platanoides*, **д** – *Acer campestre*); **14** – individual coniferous tree (**unmarked** – *Picea abies*, **е** – *Picea pungens* 'Kosteriana', **є** – *Pinus sylvestris*, **ж** – *Pinus nigra*, **з** – *Larix decidua*, **и** – *Pseudotsuga menziesii*, **і** – *Juniperus virginiana*, **к** – *Thuja occidentalis*); **15** – individual withered trees.

Table 3. Distribution of the green area of Sharivskyi Park between the allotments with predominance of different species.

Allotments with domination of certain species	Year			
	1997		2018	
	ha	%	ha	%
Quercus robur L.	6.85	23.5	7.00	23.7
Tilia cordata Mill.	0.15	0.5	0.15	0.5
Fraxinus excelsior L.	3.20	11.0	3.25	11.0
Acer platanoides L.	7.80	26.8	7.85	26.6
Salix alba L.	0.35	1.2	0.35	1.2
Robinia pseudoacacia L.	0.90	3.1	0.95	3.2
Picea abies (L.) H. Karst.	2.30	7.9	-	-
Pinus nigra J.F. Arnold	0.05	0.2	0.05	0.2
Allotments in which none of the species predominates	1.20	4.1	2.55	8.6
Orchard	2.05	7.0	1.65	5.6
Glades and meadows	3.80	13.0	2.40	8.1
Areas with withered *Picea abies*	-	-	2.85	9.6
Row of *Aesculus hippocastanum* L.	0.10	0.3	0.10	0.3
Row of *Tilia cordata*	0.40	1.4	0.40	1.4
Total	29.15	100.0	29.55	100.0

observations, in the areas where the main layer is now formed by *Acer platanoides*, *Fraxinus excelsior* predominates in the undergrowth. Conversely, in the areas where the main layer is now formed by *Fraxinus excelsior*, *Acer platanoides* dominaes in the undergrowth. Solid undergrowth of *Quercus robur* does not occur anywhere.

Hence, it is crucial to conduct researches considering oak plantations degradation (i.e., of the oak grove overstory uttermost density, of the uttermost numbers of oaks per 1 ha, of the uttermost amount of stock in oak trunks, or of the uttermost ratio between the amount of stock in oak trunks and in trunks of a species which used to be in the understory, but now shifted to represent the overstory layer instead). Studies of the cycles of change in the understory layer and in the shrub layer are also required. The resulting data should be used to develop a strategy to form park oak groves based on a geobotanical basis. Non-degraded oak groves are stable and highly decorative; they require minimal care. They represent native forests and therefore are original (different from the park plantings of other regions). Thus, preserving and maintaining non-degraded oak groves should be the main task at such sites as Sharivskyi Park. At the same time, in those areas where oak groves degradation took place, it is necessary to work on their restoration. In Sharivskyi Park, most of the oak groves have already been replaced by the derivative vegetation, which has radically changed the general appearance of the park. This situation contradicts the Florence Charter (O'Donnell, 2014). This does not mean that the whole park should turn into an oak plantation with canopy density of 0.7–1.0. Both the meadows and the sparse forests should remain, but their area should be such that caring for them remains affordable. These areas should be timely mowed so self-seedlings could not turn into the undergrowth. Forest areas of introduced species (in Sharivskyi Park, large massifs of *Picea abies*, *Larix decidua*, and other arboreal plantations are present) can also be added to the oak groves. Sparse forests and solitaires on the meadows can be composed of introduced or aboriginal species.

It should be noted that the restoration of the initial plantations is possible only after removing the derivatives and planting oaks in the cleared areas. In other words, there is no way to do such repair without the removal of living trees. The restoration of curtains and arrays of valuable introduced species (e.g., *Picea abies* and *Larix decidua*) requires the felling of currently present trees. However, nowadays, it is forbidden to cut down even dead trees. Therefore, ancient parks restoration in Ukraine will only be possible with financial investments and after legislation changes.

Conclusions

Since 1997, taxonomic, landscape, and phytocoenotic degradation has been observed in the Sharivskyi Park due to insufficient care. The temps of such degradation did slow down in the last years because most non-resistant plants in the park had already died

Table 4. The number of tree trunks by thickness degree on the test plot.

Thickness degree	Species					Total
	Quercus robur	*Acer campestre*	*Acer platanoides*	*Tilia cordata*	*Ulmus glabra*	
8		10		2	13	25
12	1	5		1	8	15
16			3	1	2	6
20			3	1	1	5
24			2	5		7
28			2	3		5
32	1		2	2		5
36	1		1	3		5
40	1		2	1		4
44	2		3	1		6
48	3					3
52	1					1
56	1					1
60	2					2
64	5					5
68	2					2
72	3					3
78	3					3
Total	26	15	18	20	24	103

off. New occasional plantings also counteract taxonomic degradation but only partly. First of all, degradation took out conifers and some rare deciduous trees. In particular, plantations of *Picea abies*, which occupied 2.3 hectares 20 years ago (7.9% of the green area), were almost completely destroyed. Very few plants of *Juniperus virginiana*, *Larix decidua*, *Pinus nigra*, *P. sylvestris*, *Pseudotsuga mensiesii*, and *Thuja occidentalis have* left – these species are on the verge of disappearance.

In most of Sharivskyi Park, the park landscape has been replaced by the forest type, while the garden and the meadow landscapes disappear. Oak groves are degrading and are being replaced by the derivative plantations. However, remaining areas with *Tilieto (cordatae) – Acereto (platanoidis) – Quercetum (roboris) - coryloso (avellanae) – caricosum (pilosae)* vegetation did not change much for the last 20 years.

The legislative prohibition of any felling on protected territories has terrible consequences: there are large areas of snag and windfall wood, which turn into thickets. Such thickets are composed of non-valuable shrubs and trees that are easily propagated by self-seeding. These thickets are not acceptable for PMLAs and endanger visitors. The degradation processes can be stopped and oak groves can be restored only if the existing derivative plantations are removed, which is currently prohibited by the Ukrainian legislation. Hence, to preserve Sharivskyi Park and other ancient parks, it is required to introduce changes allowing selective felling to the Ukrainian legislation first.

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Шарівський парк (Харківська область, Україна): історія та моніторингові дослідження за період 1997–2018 рр.

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Досліджено зміни у таксономічному складі, ландшафтах та насадженнях старовинного Шарівського парку (Харківська обл.) за літературними матеріалами та результатами власних моніторингових досліджень проведених у 1997 та 2016–2018 рр. Встановлено, що за період між дослідженнями відбулось зменшення кількості видів та культиварів, але не суттєво

(темпи зменшення таксономічного різноманіття уповільнились, оскільки за тривалий період недостатнього догляду залишились тільки найстійкіші види). Відбулася майже повна загибель ділянок *Picea abies*, які у 1997 р. займали 2,3 га (7,9 % від озелененої площі). На більшій частині Шарівського парку відбулась заміна паркового ландшафту на лісовий. У парку зникають садовий та лучний ландшафти. Діброва Шарівського парку, що представляла парковий тип ландшафту деградує, відбулась її заміна на похідні насадження, які формують лісовий тип ландшафту. Ділянки діброви з лісовим типом ландшафту виявились стійкими, деградація в них не відбувається. Відновити деградовану діброву можливо лише за умови видалення існуючих похідних насаджень, що наразі заборонено законодавством (отже необхідні зміни в законах), та штучної посадки дубів.

Ключові слова: старовинний парк, Харківська область, зміни, таксономічний склад, ландшафти, насадження, відновлення