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Assessment of the State of Green Spaces of the Park-Monument of Landscape Art of National Importance "Skala-Podilsky Park"

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Abstract. Green spaces of ancient parks are not only an important ecological component of the human environment, but also a cultural-historical factor of national identity. The history of landscape art in Ternopil region demonstrates the close ties of Ukrainian culture with Polish, Lithuanian, and Western European. Galicia is rich in architectural monuments of the past: fortresses, castles, defensive ramparts, courtyards, fortifications, fortified monasteries and temples, mansions and estates of the local gentry. Decorative parks, fruit orchards, and collections of medicinal plants were laid near such structures. Most of the old parks have undergone substantial negative changes due to the turbulent historical events in the 20th century, but some objects, even if in a neglected state, have been preserved and need restoration and maintenance.

Skala-Podilsky park-monument of landscape art of national importance was laid at the end of the 17th century. Since that, the park was repeatedly reconstructed. During this time, many ornamental and fruit-berry trees and shrubs, including exotic ones, were acclimatised. During the period of independence of Ukraine, the plantings were not properly cared for, which led to the destruction of the park's infrastructure and a decrease in the number of valuable taxa.

A tax inventory of its dendroflora was conducted, and the vital and phytosanitary condition of trees and shrubs was determined on the Alekseev scale to organise the territory and reconstruct the park. 63 taxa of trees, shrubs, and lianas were identified. It is established that the overall indicator of the relative living condition of the park's plantings is 57.7% and corresponds to the category "weakened". Among the tree stands of the park, 800 trees with defetiveness (20% of all trees) were identified. According to the assessment of the phytosanitary condition of trees and shrubs, 41% belong to the category of "satisfactory", 34% – "good", 25% – "unsatisfactory". Thus, a quarter of the registered trees require health-improving measures or removal from the plantings.

The obtained materials indicate the need for accounting and inventory of all ancient parks in Ukraine and the development of a system for their geoinformational monitoring to streamline revitalisation

Keywords: inventory of dendroflora, phytolandscape, sanitary condition of trees, rare trees

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Introduction

The main purpose of parks-monuments of landscape art is to preserve, maintain, and restore park landscape compositions, cultural legacy sites, and conduct excursions and mass recreation of the population. They are used for scientific studies, environmental education, youth education, etc. Such parks were created involving the best architects, whose creative skills forever left an important legacy in the history of Ukrainian park construction and substantially enriched it with compositional and planning techniques.

Ancient parks are an important part of our cultural legacy. The modern appearance of parks is substantially different from what they had during their heyday, both due to the turbulent historical events of the 20th century, and the natural aging of plantings, a substantial part of which has reached the age limit. Therefore, it is extremely important to preserve the old parks and revitalise them.

Skala-Podilsky Park is a monument of landscape art of national importance located on the territory of the village of Skala-Podilsky of the Borshchevsky district of the Ternopil region. In 1960, the park was classified as one of the most outstanding parks-monuments of landscape architecture.

The total area of the park according to the results of the approved land management project for organising and establishing the boundaries of the territories of the park-monument of landscape art of national importance "Skala-Podilsky Park" dated February 14, 2017, is 26 hectares. According to the regulations on the park-monument, the main part of the land plot of the park with an area of 25.6 hectares is in the use of the children's health complex "Zbruch" (now – children's health and recreation institution "Zbruch") – a branch of the Ternopil regional closed joint stock company for tourism and excursions "Ternopolturist", a plot of 0.40 hectares – Skala-Podilsk city municipal polyclinic of the Borshchevsky district (now – municipal non-profit enterprise "Skala-Podilsk territorial medical association" of Skala-Podilsk village council).

A special feature of this park is that it combines several functions while remaining in the system of public green spaces. Such use requires the introduction of effective management, one of the tools of which is maintenance and reconstruction projects. Due to insufficient care, the green spaces of Skala-Podilsky Park lose their decorative and sanitary properties and no longer properly perform environmental and scientific-educational functions. It is necessary to conduct constant care of plantings to maintain the park in proper condition: conduct sanitary and reconstructive logging, measures to prevent wild self-seeding, and preserve plant compositions, so it is relevant to develop scientifically based design measures for the organisation of the territory and reconstruction of Skala-Podilsky Park.

The study of historical parks in different regions of Ukraine is covered in a number of scientific publications, namely: the phytocenotic structure of ancient parks and ways of its regulation was investigated by R.B. Dudin (Dudin, 2013); N.V. Hatalska investigated the introducers of ancient parks-monuments of landscape art of the Central Dnieper upland region (Hatalska, 2011); G.V. Denisova conducted a comprehensive assessment of the decorative effect of palace and park ensembles of the Western forest-steppe (Denisova, 2018); N.A. Oleksiychenko and S.M. Pidhovna conducted a retrospective and comprehensive analysis of parks-monuments of landscape art of the Ternopil region (Oleksiychenko & Pidhovna, 2019); parks-monuments of landscape art in Eastern Podillia were investigated by Yu.A. Klimenko (Klimenko, 1999, 2006), Yu.A. Elisavenko (Elisavenko et al., 2018).

The purpose of the study is to conduct a full-scale examination of the territory of Skala-Podilsky Park, an inventory of dendroflora, an analysis of its taxonomic, qualitative, and age structure, an assessment of life and phytosanitary conditions, an introduction of geoinformational monitoring of green spaces in the park.

Materials and Methods

The object of the study is green spaces on the territory of the park-monument of landscape art of na-

tional importance "Skala-Podilsky Park" in the village of Skala-Podilsky of the Borshchevsky district of the Ternopil region. An inventory of dendroflora was conducted in the summer of 2018 in accordance with the current "Instructions for the inventory of green spaces in localities of Ukraine" (Instruction, 2001). Considering the fact that the area of the Park is 26 hectares, the inventory of tree and shrub vegetation was conducted in two ways: in the central and North-Eastern parts of the park – by an individual tree inventory; in the rest of the territory – by a stand-level method. Biometric indicators were determined to analyse and describe the condition of plants: the diameter and height of trees, and the state of their vitality, established according to the technique of "Instructions for the inventory of green spaces in localities of Ukraine".

Species of woody and shrubby plants are identified according to the determinant of N.M. Andronov (Andronov, 1974) and reference books of M.A. Kohno (Kohno, 2001, 2002). The taxonomic composition of dendrocenoses was determined by route surveys.

The phytosanitary condition of woody and bush plant species is assessed by external morphological features. The V.A. Alekseyev category scale (Alekseyev, 1989) was used to diagnose the vital state of plantings and tax indicators of trees: age, diameter, and height. A simplified assessment methodology was applied, dividing trees into three categories of condition, as required by the "inventory guide"...(Instruction, 2001): "good", "satisfactory", or "unsatisfactory". Defective trees with the presence of visible or hidden trunk defects were determined separately: hollows, scuffs, cracks, splits, wood inflows, mechanical damage, rot, etc.

Both conventional instruments support – an optical altimeter, a Haglof measuring plug, a tape measure, and a modern global positioning device (GPS), Geographic information systems (GIS), and remote sensing devices were used (Kuziovich et al., 2021). The coordinates of each tree were obtained using Garmin eTrex 20 GPS with binding to reference points on the ground and its subsequent correction based on Landsat remote sensing materials in the QGis 3 GIS. In this way, a geoinformational database of the tree and bush vegetation was created, in which the coordinates of its location were combined with information on species, phytosanitary, and basic biometric indicators (Lakida, Bidolakh & Kusevich, 2020). This enabled the storage of it in digital format, automatically processing data, and displaying it on the map. Based on this approach, sustainable monitoring of the state of green spaces in the park was organised and 3D visualisation of the park territory was created in the specialised Realtime Landscaping Architect 16 programme.

Results and Discussion

As a result of the conducted research, the taxonomic composition of Park plantings was determined and analysed, its qualitative assessment was conducted and the phytosanitary condition was determined, and project proposals for the reconstruction of the park were developed in the form of an explanatory note, cartographic material, and a three-dimensional model of the territory.

As a result of the tax inventory of green spaces in Skala-Podilsky Park, 63 species and cultivars were identified (Table 1), of which 8 are pin plants, 16 are deciduous shrubs, and 2 are lianas. Among the main types of dendroflora are common ash, Norway maple, small-leaved linden, horse chestnut, robinia pseudoacacia, Scots elm, field maple, hornbeam, and bird cherry. During its heyday, hedges of European box and northern white-cedar were created in the park, which were regularly cared for. Their deformed fragments have been preserved to this day. The park is based on the remains of natural forest stands, as evidenced by centuries-old ash trees, lindens, poplars, and oaks. Among the pin species, artificially planted curtains of black and Scots pine, single trees of Weymouth pine, solitary and group plantings of European spruce and northern white-cedar were preserved in satisfactory condition. One silver fir tree has been identified, which is in a very good condition far beyond its range, which indicates the prospects for its wider use in landscaping of Podillia.

Table 1. Species composition of the dendroflora of Skala-Podilsky Park and its qualitative condition

No.	Wood species	Total trees	Quality condition		
			Good	Satisfactory	Unsatisfactory
1	2	3	4	5	6
1	Cherry plum *(Prunus cerasifera* or *Prunus divaricata* Ledeb.)	25	8	11	6
2	Silver birch (*Betula pendula* Roth.*)*	6	1	1	4
3	Dark birch *(Betula obscura* A. Kotula*)*	6	-	1	5
4	Common privet (*Ligustrum vulgare* L.)	1	-	1	-
5	Warty spindle *(Euonymus verrucosus* Scop.*)*	1	1	-	-
6	European birch bark *(Euonymus europaeus* L.*)*	2	1	1	-
7	Black elderberry *(Sambucus nigra* L.*)*	9	9	-	-
8	Black elderberry plumosa *(Sambucus nigra 'Plumosa'* L.*)*	1	1	-	-
9	Forest beech *(Fagus sylvatica* L.*)*, purpurea form	1	-	1	-
10	Nicker dioecious *(Gymnocladus dioicus* (L.) K. Koch*).*	2	1	1	-
11	White willow *(Salix alba* L.*)*	8	3	3	2
12	Goat willow *(Salix caprea* L.*)*	5	-	-	5
13	Scots elm *(Ulmus glabra* Huds.*)*	127	66	37	24
14	Horse chestnut *(Aesculus hippocastanum* L.*)*	92	26	46	20
15	Red horse chestnut 'Brioti' *(Aesculus × carnea* Zeyh.*)*	2	-	2	-
16	Honey locust *(Gleditsia triacanthos* L.*)*	3	1	2	-
17	Northern European hawthorn *(Crataegus oxyacantha* L.*)*	3	3	-	-
18	Common hawthorn *(Crataegus monogyna* Jacq.*)*	7	2	4	1
19	Common walnut *(Juglans regia* L.*)*	41	23	11	7
20	Black walnut *(Juglans nigra* L.*)*	6	3	3	-
21	Mountain ash *(Sorbus aucuparia* L.*)*	5	3	2	
22	Common hornbeam *(Carpinus betulus* L.*)*	245	120	81	44
23	Forest pear *(Pyrus communis* L.*)*	14	3	7	4
24	Common oak *(Quercus robur* L.*)*	10	7	2	1
25	Northern oak *(Quercus rubra* L.*)*	2	1	1	-
26	Five-leaved ivy *(Parthenocissus quinquefolia* (L.) Planch*)*	17	17	-	-
27	Littleleaf mock-orange (Philadelphus microphylus Gray.)	4	4	-	-
28	Wayfarer (*Viburnum lantana* L.*)*	1	1	-	-
29	Guelder-rose *(Viburnum opulus* L.*)*	5	5	-	-

Table 1, Continued

1	2	3	4	5	6
30	Southern catalpa *(Catalpa bignonioides* Walt.*)*	2	-	2	-
31	Norway maple *(Acer platanoides* L.*)*	660	319	236	105
32	Field maple *(Acer campestre* L.*)*	440	128	196	116
33	Boxelder maple *(Acer negundo* L.*)*	5	2	3	-
34	Sycamore maple *(Acer pseudoplatanus* L.*)*	44	23	9	12
35	Purple-leaved Sycamore maple *(Acer pseudoplatanus 'Atropurpureum'* L.*)*	5	-	4	1
36	Sugar maple (silver) *(Acer saccharinum* L.*)*	4	2	2	-
37	Small-leaved linden *(Tilia cordata* Mill.*)*	235	61	135	39
38	Large-leaved linden (*Tilia platyphyllos* Scop.)	32	11	17	4
39	Common hazel (*Corylus avellana* L.*)*	7	4	3	-
40	Holly-leaved barberry *(Mahonia aquifolium* (Pursh) Nutt.)	1	1	-	-
41	European larch, *(Larix decidua* Miller ssp. Polonica (Raciborski & Wóycicki) Domin)	20	-	12	8
42	Maple-leaved sycamore *(Platanus orientalis* L.*)*	2	-	2	-
43	Common ivy *(Hedera helix* L.*)*	-	-	-	-
44	Robinia pseudoacacia *(Robinia pseudoacacia* L.*)*	544	58	214	272
45	European box *(Buxus sempervirens* L.*)*	171	30	139	2
46	Common snowberry *(Symphoricarpos albus* Blake*)*	15	10	5	-
47	Weymouth pine *(Pinus strobus* L.*)*	9	1	3	5
48	Black pine *(Pinus nigra* Arn.*)*	31	1	26	4
49	Scots pine *(Pinus sylvestris* L.*)*	12	4	3	5
50	Spirea willow or Meadowsweet willow *(Spiraea salicifolia* L.*)*	1	1	-	-
51	White poplar *(Pópulus* álba L.*)*	70	17	28	25
52	Canadian poplar *(Populus deltoids* W.Bartram ex Marshall*)*	7	-	-	7
53	Black poplar *(Populus nigra* L.*)*	6	-	2	4
54	Northern white-cedar*Thuja occidentalis* L.)	62	18	18	26
55	Northern white-cedar columnar (*Thuja occidentalis* L. "Columna")	4	4	-	-
56	Common bird cherry (*Padus racemosa* Gilib.)	4	1	2	1
57	Black cherry (*Prunus serotina* Ehrh.)	5	1	3	1
58	Sweet cherry (*Cerasus avium* (L.) Moench)	80	34	30	16
59	Dog rose *(Rosa canina* L.*)*	2	2	-	-
60	Apple tree *(Malus domestica*Borkh.*)*	60	3	27	30
61	European spruce *(Picea abies* (L.) Karst.*)*	39	1	16	22
62	Silver fir *(Abies alba* Mill.*)*	1	-	1	-
63	Common ash *(Fraxinus excelsior* L.*)*	722	309	250	163
Total		**3953**	**1356**	**1606**	**991**

A substantial amount of self-seeding undergrowth was identified in the park, namely: Norway maple, field and boxelder maples, sweet cherries, common bird cherry, cherry plum, common ash, black elderberry, common wayfarer, common viburnum, common hazel, etc. Acclimatised exotic taxa grow here, including: maple-leaved sycamore, sugar maple, late bird cherry, holly-leaved barberry, dioecious nicker tree, red horse chestnut, southern catalpa, honey locust, northern oak, black walnut, etc. Purple-leaved forms of sycamore maple and beech were identified, red book species – dark birch, black elderberry of dissected leaf form, mock-orange, willow spirea, etc.

The second storey of the Park stands is represented by mountain ash, hornbeam, Norway maple, field, and boxelder maples, cherry plum, Northern white-cedar, and other species. In general, the fullness and closeness of the park stand are high, which determines the predominance of the forest type of landscape in Skala-Podilsky Park. Because of this, the grass cover is poorly developed, and there are also relatively few shrubs. Two lianas were identified: common ivy and five-leaved ivy.

Old trees grow in the park, more than a hundred years old, with a diameter of about 1 meter or even more at chest height. Such trees form a fund for identifying so-called patriarchal trees, or botanical monuments of nature with protected status. Century-old trees should also be protected as mother trees to produce valuable seeds. A unique specimen of the small-leaved linden, which is distinguished by its impressive size (229 cm in diameter) and multi-stemmed crown shape, deserves to be granted conservation status. The tree needs sanitary care and conservation.

The most interesting specimens of the park's century-old trees are presented in Table 2.

Table 2. Rare trees of Skala-Podilsky Park

No.	Tree type	Diameter (cm)	Height (m)	Age (years)	Necessary wellness measures
1	**3**	**4**	**5**	**6**	**7**
1	Forest beech *(Fagus sylvatica* L.*)*	122	32	160	crown cleaning
2	Forest beech *(Fagus sylvatica* L.*)*, F. purpurelista	98	29	110	crown cleaning
3	Silver willow *(Salix alba* L.*)*	86	20	80	crown cleaning
4	Scots elm *(Ulmus glabra* Huds.*)*	80	29	100	
5	Horse chestnut *(Aesculus hippocastanum* L.*)*	104	26	160	crown cleaning
6		120	24	160	crown cleaning
7		120	26	160	crown cleaning, conservation
8		122	27	160	crown cleaning, conservation
9	Honey locust *(Gleditsia triacanthos* L.*)*	72	28	80	pruning dry branches
10	Common hornbeam *(Carpinus betulus* L.*)*	88	25	140	crown cleaning, conservation
11	Common oak *(Quercus robur* L.*)*	140	34	180	crown cleaning
12	Northern oak *(Quercus rubra* L.*)*	110	32	100	
13	Norway maple *(Acer platanoides* L.*)*	84	30	90	pruning dry branches
14		86	30	90	pruning dry branches
15	Field maple *(Acer campestre* L.*)*	82	27	110	crown cleaning
16	Small-leaved linden *(Tilia cordata* Mill.*)*	156	31	180	conservation
17		229	22	240	treatment and conservation
18	European larch, *(Larix decidua* Miller ssp. Polonica*)*	84	31	120	crown cleaning
19		84	31	120	crown cleaning
20		84	31	120	crown cleaning
21		86	31	120	crown cleaning
22	Robinia pseudoacacia *(Robinia pseudoacacia* L.*)*	54/84	27	120	conservation

Table 2, Continued

1	3	4	5	6	7
23	Weymouth pine *(Pinus strobus* L.*)*	120	33	140	
24	Black pine *(Pinus nigra* Arn.*)*	105	28	120	
25	White poplar *(Pópulus álba* L.*)*	196	37	160	pruning dry branches
26		178	36	150	pruning dry branches
27	Common ash *(Fraxinus excelsior* L.*)*	152	34	160	conservation
28		122	32	140	crown cleaning
29		132	34	140	crown cleaning
30		126	32	140	crown cleaning

The share of viable trees in Skala-Podilsky Park is 75%, but this is an average result. Regarding individual species, different trees and shrubs feel different in similar conditions.

The overall indicator of the relative living condition of the park's plantings, calculated according to the Alekseyev method (Alekseyev, 1989), is 57.7% and corresponds to the category "weakened".

According to the criteria of phytosanitary condition of trees, it was identified that 41% of the total number of plants belongs to the category of "satisfactory", 34% to the category of "good", and 25% to "unsatisfactory".

Thus, a quarter of the registered trees require the use of health-improving measures or cutting down. The worst condition is characterised by the following species: Canadian poplar – all trees identified in the park are in an unviable state and are intended for extraction, black poplar – 66% of trees are in an unsatisfactory condition, and white poplar – 36%. In silver and dark birch trees, 66% and 80% of trees are dying off, respectively. There is a lot of drop-off in horse chestnut – 22% in an unsatisfactory condition, hornbeam –19% in an unsatisfactory condition. Large indicators of the unsatisfactory condition of maples can be explained by the old age of these species and excessive thickening of Park plantings, which causes high intraspecific competition and, as a result, a high drop-off among young and ripening trees. The same can be said about the state of plantings of Robinia pseudoacacia, which are dying off en masse due to overripe age. Therewith, this breed is represented by a large number of viable young renewals and undergrowth.

The oaks identified in the park are in good condition, both local common and introduced Northern (Red), walnuts – common and black. The predominant type of dendroflora of the park is common ash, whose century-old trees are in good living condition and often form an aesthetically attractive crown. Common ash trees, despite their old age and periodic droughts, firmly hold the dominant position (43% of the trees are in good condition, and 35% are in satisfactory living condition) and form a stable viable undergrowth throughout the park.

Examination have established that the condition of pin species is unsatisfactory: Scots pine, black pine, and Weymouth pine trees planted more than a hundred years ago are in a weakened state. The good condition was identified only in one black pine tree, 13% – in an unsatisfactory condition, the rest, although they look satisfactory, but do not show high viability. European spruce trees were also identified in the park, which are in good condition.

The best living condition in the is evidenced by such breeds as common ash, common and Northern oaks, small-leaved and broad-leaved linden trees, sugar maple, Norway, and field maples, Northern white-cedar, black and common walnuts, Robinia pseudoacacia, cherry. The poplars of all species are characterised by the lowest state of vitality which can be explained by their age and the completion of the life cycle, and fruit trees, competing with neighbouring wild trees.

Changes in the appearance of trees, in particular, their trunks, were also investigated for a comprehensive assessment of the Park's tree stands. Deviation from the normal shape of the trunk in forestry practice is considered a flaw (defectiveness). The presence of defect indicates a decrease in resistance, durability, or the presence of plant diseases, which negatively affects the condition of

plantings. Among the tree stands of the park, 800 trees with defetiveness (20% of all trees) were identified. Defectiveness is represented by the following types of changes: trunk curvature (8% of the total number of defective trees), multi-tip (two or more, 62%), hollows and trunk rot (21%), bark scraping or burns (1%), and other deviations from the norm (8%). Some trees have several types of defects.

The main reason for the removal of trees to the felling in Skala-Podilsky Park is dead wood, in second place – trunk rot caused by the activity of pathogenic fungi (Table 3).

Table 3. Register of reasons for removing trees from plantings in Skala-Podilsky Park

No.	Reason for removing the tree	Number, pcs.	%
1	Dead wood	192	20
2	Trunk rot	181	19
3	Oppression	165	17
4	Thickening of the stand	99	10
5	Crown drying	84	9
6	Trunk tilt (risk of falling)	79	8
7	Dry top	80	8
8	Broken top	45	4
9	Trunk cancer	27	3
10	Bark damage	17	2
	Total	**969**	**100**

Almost 10% of the total number of trees have a dry top, which substantially affects the decrease in the viability and decorative effect of these specimens. The most common tree species with dry tops are poplars, elms, firs, ash trees, and maples.

Conclusions

The results of a study of green spaces in Skala-Podilsky Park showed the presence of 63 taxa of trees, shrubs, and lianas in it. Analysis of the living state of phytolandscapes of the research object allowed establishing that the overall indicator of the relative living state of plantings is 57.7% and corresponds to the category "weakened". Among the woody plants of the park, 800 trees with defectiveness (20% of all trees) were identified. According to the assessment of the phytosanitary condition of trees and shrubs, 41% belong to the category of "satisfactory", 34% – "good", 25% – "unsatisfactory". Consequently, a quarter of the registered trees require health-improving measures or removal from plantings and require urgent regulatory measures to improve their vitality and decorativeness.

It is advisable to conduct work on restoring its aesthetics, performing environmental and social functions, creating stable and artistically attractive landscape compositions, etc. to improve the overall condition of the park.

In general, the conducted research gives grounds to draw conclusions about the importance of systematic accounting, examination, and inventory of ancient parks in Ukraine, and the introduction of a system of their geoinformational monitoring to streamline and revitalise them.

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Оцінка стану зелених насаджень парку-пам'ятки садово-паркового мистецтва загальнодержавного значення «Скала-Подільський Парк»

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Анотація. Зелені насадження старовинних парків є не тільки важливим екологічним компонентом середовища проживання людей, а й культурно-історичним фактором національної ідентичності. Історія садово-паркового мистецтва Тернопілля демонструє тісні зв'язки української культури з польською, литовською та західноєвропейською. Галичина багата на архітектурні пам'ятки минулого: фортеці, замки, оборонні вали, двори, фортифікаційні споруди, укріплені монастирі і храми, маєтки і садиби місцевої шляхти. Біля таких споруд було заведено закладати декоративні парки, фруктові сади, колекції лікарських рослин. Більшість старовинних парків через буремні історичні події у XX столітті зазнали значних негативних змін, однак деякі об'єкти, нехай у занедбаному стані, збереглися і потребують відновлення та догляду. Скала-Подільський парк-пам'ятку садово-паркового мистецтва загальнодержавного значення було закладено наприкінці XVIII ст. В подальшому парк неодноразово реконструювали. За цей час тут було акліматизовано багато декоративних і плодово-ягідних дерев та чагарників, зокрема екзотичних. За період незалежності України не проводили належний догляд за насадженнями, що призвело до руйнування інфраструктури парку та зменшення кількості цінних таксонів. Із метою організації території та реконструкції парку-пам'ятки проведено таксаційну інвентаризацію його дендрофлори, визначено життєвий і фітосанітарний стан дерев і кущів за шкалою Алєксєєва. Виявлено 63 таксони дерев, кущів і ліан. Встановлено, що загальний показник відносного життєвого стану насаджень парку становить 57,7 % і відповідає категорії «ослаблений». Серед деревних насаджень парку виявлено 800 дерев із фаутністю (20 % усіх дерев). За оцінкою фітосанітарного стану дерев і кущів 41 % належить до категорії «задовільний», 34 % – «добрий», 25 % – «незадовільний». Отже, четверта частина облікованих дерев потребує проведення оздоровчих заходів або видалення з насадження. Отримані матеріали свідчать про необхідність проведення обліку і інвентаризації усіх старовинних парків України та розроблення системи їх геоінформаційного моніторингу з метою впорядкування ревіталізації

Ключові слова:інвентаризація дендрофлори, фітоландшафт, санітарний стан дерев, раритетні дерева