



Article Preferences of Young Adult Visitors to Manor Parks in South Poland: A Study on Ecosystem Services and Scenic Quality

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Abstract: Manor parks are characteristic cultural features in Polish agricultural landscapes. About 10,000 manor parks are estimated to exist in Poland, and due to their high natural, historic and scenic value, these features represent potential in terms of ecosystem services. To properly manage these sites, it is advisable to determine the preferences of its visitors. The present study presents the results of a quantitative survey based on a group of 352 young visitors to manor parks in south Poland. The results show that visitors with higher monthly incomes have a statistically significant higher awareness as far as caring for the authenticity and preservation of the natural and historical heritage of manor parks and forests. Conversely, for visitors with lower incomes, additional touristic promotion attractions (e.g., souvenirs, guided visits) are increasingly important. The results of the study provide an important basis of information for local authorities, as well as private owners, with regard to preserving the natural and historical values (which are closely connected with the scenic values) of these sites, as well as local tourism development. The values of nature, sustainability, tourism and the improvement of life quality are linked to the enhancement of manor parks, as these facilities are providers of ecosystem services.

Keywords: manor park; forest; preferences; scenic quality; tourism development; Poland

1. Introduction

Poland, as one of the member states of the European Union, is required to safeguard natural and semi-natural habitats, as well as menaced species of plants and animals, which are extremely important in the context of preserving the biodiversity of agricultural areas, together with their scenic values and ecosystem services [1].

Ecosystem services should be understood as all benefits derived from the environment by humans [2] According to Mengist et al. (2020) [3] ecosystem services are the conditions and processes through which natural ecosystems sustain and improve human life. Ecosystem services are also defined as the set of products (material goods) and ecosystem functions (life-sustaining and life-enhancing functions) that are useful to human society [4,5]. That is, they meet the fundamental needs of society and have a direct impact on human health and overall well-being. A commonly used classification of ecosystem services was proposed in the Millennium Ecosystem Assessment [6]. It distinguishes supporting services (e.g., soil formation, photosynthesis, primary production, water cycling), provisioning services (e.g., food, fuel, genetic resources, water), regulating services (e.g., climate, water



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Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). and erosion regulation) and cultural services (e.g., recreation, ecotourism, cultural diversity, educational values and inspiration).

In addition, scenic qualities are indispensable characteristics of the elements that make up cultural ecosystem services: this applies to assessing the scenic qualities of vegetation or cultural features as well as, e.g., tourist facilities [7–9]. Daniel et al. (2012) [10] have established that cultural ecosystem services are operationally definable by a system of interdependent socioecological models including the recreational value of park tourism, the aesthetic appreciation of managed natural forests and the heritage value of cultural landscapes, among others. Furthermore, in the Nature Conservation Act of 16 April 2004 (Poland), landscape values are defined as "ecological, aesthetic or cultural values of the area and the relief, creations and components of nature shaped by the forces of nature or human activity" (Article 5, p. 23).

Ecosystem services assessment can also be used as a means to determine how relevant their contribution is to sustainable spatial management at different levels of territorial units [11]. The concept of ecosystem services can also play a significant role in sustainable development in a geo-ecological and socio-economic synthesis [12].

Manor parks are characteristic features in agricultural areas in Poland (over 10,000 such facilities are known within the country). These are most often found in open rural land-scapes, on hills or on riverside slopes gently passing into forests [13]. As defined by Latowski and Zielinski (2001) [14], a manor park is an area that is outside the city and on agricultural land, and in its composition, it includes a manor house, farm buildings, gardens, high and low greenery, water features (e.g., pond) and other small architecture elements (e.g., sculptures). In some manor parks, the recreational area was created by incorporating an existing forest or part of it. The use of natural features was characteristic of landscape parks, which were mostly established in the 18th and 19th centuries. Currently, some forests still belong to manor parks and are a remnant of cultural and natural heritage [15].

Forests in manor parks can function as nature refuges and be "environmental islands" due to the presence of forest species compatible with the oak-hornbeam habitat and oldgrowth forest species [16]. Sites such as manor parks with oak-hornbeam forests represent a potential value for the agricultural landscape in terms of strengthening its natural system [16]. All forests, including those found in manor parks, provide several important health functions for life and for physical as well as psychological human development and spiritual functions (cultural, scientific and didactic) [17]. Rural areas where manor parks are most often found are often attractive for nature conservation programs. By improving the spatial order, the image of the region is strengthened, thus increasing its tourism potential. This also happens by increasing biodiversity and the presence of valuable forest species and by improving landscape values [18]. The economic potential is also strengthened through manor parks as a part of cultural heritage [19].

The appropriate management of these areas may create conditions for the development of a local economy focused on the production of ecological goods or tourism. Additionally, forests themselves and forest management in connection with the industry processing forest products are becoming relevant factors for the local population looking for employment [20]. Manor parks are thus important spatial, historical and cultural assets of rural areas in Poland [21]. The demand for the social functions of forests increases as the society becomes more affluent and better educated [22], since social (survey) research shows that the most important public functions of forests for Poles are air protection, providing optimal living conditions for plants and animals and recreation [23].

Despite such widely documented socially, healthily, environmentally and economically important functions of greenery, including forests and manor parks, there is still a deficit of research exploring the expectations and preferences of visitors to manor parks with forests regarding the management of such places [24,25].

For that reason, this paper aims to study the preferences of manor park visitors, depending on their average household income and including factors such as scenic qualities and the provision of ecosystem services.

Scenic and ecosystem service values that are strictly connected with human well-being are closely related [26]. Determining the link between them will be significant to the realization of the sustainable development of manor parks.

The following research hypotheses have been formulated:

H1. *The higher the frequency of visits to manor parks, the higher the awareness of supporting the historic value of manor parks in the case of scenic qualities;*

H2. The higher the income of visitors to manor parks, the higher the awareness in the case of scenic qualities and the higher the awareness of supporting the historical value of manor parks;

H3. *The lower the income of visitors to manor parks, the greater the importance of other touristic promotion attractions (e.g., guided visits).*

Research on the preferences of visitors to manor parks in Poland regarding the development of tourism as one of the aspects of services has not been carried out in Poland, hence the innovative character of this study. The results will provide important data for local municipalities in improving the design of manor parks in terms of ecosystem services and the expectations of visitors of these facilities.

2. Materials and Methods

2.1. Study Area

The study was conducted in 30 manor parks with forest characters in the Sandomierska Basin in southern Poland (Figure 1).

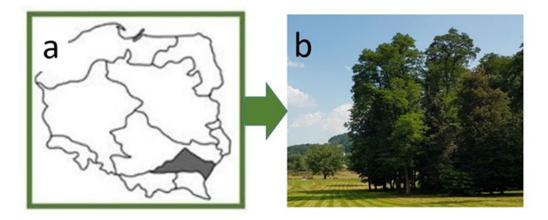


Figure 1. Localization of manor parks in the Sandomierska Basin, Poland (**a**), the example of a manor park with a forest (**b**).

All manor parks were established in landscape style at the turn of the 18th and 19th centuries on fertile, oak-hornbeam soils. The owners of the time incorporated the oak-hornbeam forests into the parkland. The size of the forests ranged from 1.5 ha to 2 ha. The forests were adjacent to either areas with low vegetation (gardens) on the park side or agricultural areas, i.e., arable fields. The study selected manor parks that had not been tended since the Second World War. These sites are still not revitalized, and the vegetation is spontaneously formed.

2.2. Study Design, Participants and Questionnaire

Empirical materials were collected by using the auditorium questionnaire technique. The answers to questionnaires were collected between May and September 2022. Completing the questionnaire took approx. 5–7 min. The respondents were students who had

visited manor parks in the Sandomierska Basin at least once during the last year, and the criteria assumed for the selection were met by 352 respondents. In the analysis, they were treated as manor park visitors, and their answers were used to verify the research hypotheses formulated above. According to the assumed goal of the study and the formulated research problems, the survey questionnaire included questions about the following:

- Respondents' characteristics (accounting for gender, age, place of residence, education and average per capita household monthly income—divided into three categories, as presented in Table 1).
- Frequency of visiting manor parks—measured on a 6-point scale where 1—every day, 2—once a week, 3—once a month, 4—sometimes a year, 5—once a year and 6—does not visit this type of place; only persons who gave answers from 1 to 5 were further analyzed in the survey.
- Reasons for visiting manor parks—multiple choice question; respondents could select any number of answers from the list (learning about the history of manor parks, relaxing in manor parks, interest in this type of architecture, interest in greenery in manor parks, the interesting appearance of parks, places attractive to tourists);
- Selected criteria of ecosystem services [27]: (position scale 1–5: 1—definitely irrelevant factor; 5—definitely relevant factor). Statements regarding: the possibility of buying souvenirs, the possibility of hiring a guide, tourist information in the media, the promotion of the manor park, the involvement of the local community in running this type of place, accommodation nearby or in the area.
- Selected criteria of scenic qualities [27]: (position scale 1–5: 1—definitely irrelevant factor; 5—definitely relevant factor). Statements regarding: the current appearance of the forest should be preserved without conversion, the current appearance of the forest should be preserved with consideration of the species that historically occurred here, the current appearance of the forest should be maintained with the addition of recreational infrastructure features, the historic appearance of the forest should be maintained without the addition of recreational facilities, the historic appearance of the forest should be maintained without the addition of recreational facilities, the historic appearance of the forest should be introduced.

	Gen	der		
Female		Male		
46.02		53.98		
	Educa	ation		
Secondary		Higher		
96.02		3.98		
	Place of R	esidence		
Manor areas surroundings	Towns with fewer than 50,000 residents	Towns with 50,000–100,000 residents	Cities with over 100,000 residents	
42.04	17.04	5.96	34.96	
	Per Capita Inco	me PLN/EUR *		
1500/ 1501-3		3000/ Over	/ Over 3000/	
318.49 318.50		6.97 636.97 EUR		
(1)		(3)		
17.90		9 40.91		
	* 1: . [00]			

Table 1. Socio-demographic structure of the research group, accounting for selected characteristics (%).

* according to [28].

2.3. Characteristics of Respondents

The participants of the research were aged between 18 and 26 (average—21.04 years). In terms of gender, the sample consisted of 46% women and 54% men. Over 42% of the

respondents lived in manor park areas, nearly 35% lived in towns of over 100,000 residents, 17% lived in towns with fewer than 50,000 residents and 5.9% lived in cities with a population between 50,000 and 100,000 people. A total of 96.02% of respondents declared having secondary education, while the remaining 3.98% reported having higher education. The analysis of the economic situation of the respondents showed that 41% of them had a monthly income of PLN 1500–3000 per person, while 17.90% made less than PLN 1500; a total of 40.9% of the respondents had an income of more than PLN 3000 per person, per month (Table 1).

2.4. Statistical Analysis

To initially verify the hypotheses set out, an analysis was carried out to determine the existence of a relationship between the selected criteria of ecosystem services and the criteria of scenic qualities and between the frequency of visits and the per capita monthly income using Spearman's Rank correlation coefficient. In order to assess whether per capita income (divided into three categories) variables affected the opinion about the selected criteria of ecosystem services and the criteria of scenic qualities, a non-parametric U Mann–Whitney test was used for a deeper statistical analysis. To further verify the hypotheses related to the influence of income on visitors' preferences for manor parks, a test of frequency comparisons of reasons for visiting manor parks was performed through a Chi2 Pearson test.

To assess the statistical significance of the test statistics in the Spearman's Rank correlation coefficient, the U Mann–Whitney test and the Chi2 Pearson test, the assumed significance level was $\alpha = 0.05$.

3. Results

In order to initially verify hypotheses 1–3, i.e., the relationship between the frequency of visiting the manor parks and the income of the respondents as well as between the selected criteria of ecosystem services and the criteria of scenic qualities, a Spearman correlation analysis was performed. When analyzing the relationship between the frequency of visits to the manor parks and the criteria of ecosystem services and the criteria of scenic qualities, no statistically significant relationships were found. Therefore, the results obtained did not confirm H1. In the case of the relationship between income and the elements of the tourist attraction of a manor park and the directions of the development of this type of park, weak correlations, although statistically significant, were shown with all the touristic promotion tools and with four out of five statements about the development of manor parks (Table 2).

Regarding the opinion of visitors to manor parks with incomes up to PLN 1500, the most important criteria of ecosystem services were the ones related to information about the touristic promotion on site and in media (both means scored 4.25). For respondents with incomes above PLN 1500, the most important aspects were those related to the involvement of the local community in running this type of place. The least important for all respondents was the possibility of buying souvenirs. In the case of the scenic qualities of the manor park, all respondents agreed with the statement that the current appearance of the forest should be preserved with consideration of the species that historically occurred there. Nevertheless, visitors with incomes below PLN 3000 were least likely to agree with this statement. The historic appearance of the forest should be maintained without the addition of recreational facilities, for those with incomes above PLN 3000, who mostly disagreed with the ideas that the historic appearance of the forest should be retained and that recreational infrastructure features should be introduced (Table 3).

	Frequency of Visits	Per Capita Income
Criteria of ecosystem services in manor parks		
Possibility of buying souvenirs	-0.04	-0.29 *
Possibility of hiring a guide	-0.02	-0.30 *
Tourist information in the media	-0.05	-0.24 *
Promotion	-0.07	-0.17 *
Involvement of the local community in running this type of place	-0.09	-0.02 *
Accommodation nearby or in the area	0.03	-0.09 *
Criteria of scenic qualities		
The current appearance of the forests should be preserved without conversion	0.02	-0.02
The current appearance of the forest should be preserved with consideration of the species that historically occurred here	0.06	0.12 *
The current appearance of the forest should be maintained with the addition of recreational infrastructure features	-0.05	-0.19 *
The historic appearance of the forest should be maintained without the addition of recreational facilities	0.06	0.17 *
The historic appearance of the forest should be retained, and recreational infrastructure features should be introduced.	-0.07	-0.32 *

Table 2. Correlation analysis between the selected criteria of ecosystem services and the criteria of scenic qualities and between the frequency of visits and per capita income.

* means that the *p*-value < 0.05.

The analysis employed the U Mann–Whitney test. All the statistical values in the table marked with the (*) symbol correspond to statistically significant differences at the significance level assumed for the research. The higher the income, the lower the importance of the "possibility to buy souvenirs" criterion of ecosystem services. These differences were statistically significant in the comparison between the respondents with the lowest and medium incomes (group 1 versus group 2, respectively), between the respondents with the lowest and highest incomes (group 1 versus group 3) and between the respondents with medium and high incomes (group 2 versus group 3, respectively). Thus, these results confirm H3. An analogous correlation occurred in the case of three more criteria: having the possibility to hire a guide, having touristic information in the media and having touristic information locally. Higher-income groups yielded a statistically significant decrease in the preference of these features when comparing the respondents of the highest income group (group 3) with those of the lowest and medium income groups (groups 1 and 2, respectively). Finally, regarding the need to involve the local community in running this type of place, this criterion was found to be more important for those with lower incomes, but a statistically significant difference was only shown between the lowest and medium incomes (group 1 versus group 2). Only the criterion "accommodation nearby or in the area" showed no differentiation by income level (Table 4).

For the scenic qualities criteria such as "the historic appearance of the forest should be retained" and "recreational infrastructure features should be introduced", the lower the income, the more the respondents agreed that it was worthwhile to add recreational infrastructure features in manor parks; these differences were statistically significant in the comparison between the respondents with the lowest and medium incomes (group 1 versus group 2 and group 2 versus group 3, respectively). An analogous correlation occurred in the case of "the current appearance of the forest should be maintained with the addition of recreational infrastructure features", but a statistically significant difference was shown between the lowest and highest incomes (group 1 versus group 3) and between the medium and highest incomes (group 1 versus group 3, respectively). In the case of the statements advocating for the preservation of the historic appearance of the forest without the addition of recreational facilities or the consideration of the species that historically occurred in these forests, the level of agreement with this statement decreased as the respondents' income

decreased, but a statistically significant difference was shown between the lowest and highest incomes (group 1 versus group 3) and between the medium and highest incomes (groups 2 and 3, respectively) (Table 4).

Table 3. An average score of the selected criteria of ecosystem services and the criteria of scenic qualities by visitor income (ranging from 1 to 5).

	Household Income per Capita Groups		
	1	2	3
Criteria of ecosystem services			
Possibility of buying souvenirs	3.16	2.76	2.38
Possibility of hiring a guide	3.56	3.43	2.97
Tourist information in the media	4.25	4.17	3.71
Promotion	4.25	4.25	3.98
Involvement of the local community in running this type of place	4.08	4.30	4.23
Accommodation nearby or in the area	3.51	3.68	3.41
Criteria of scenic qualities			
The current appearance of the forests should be preserved without conversion	3.67	3.77	3.66
The current appearance of the forest should be preserved with consideration of the species that historically occurred here	4.17	4.18	4.49
The current appearance of the forest should be maintained with the addition of recreational infrastructure features	4.02	3.35	3.35
The historic appearance of the forest should be maintained without the addition of recreational facilities	2.83	3.01	3.47
The historic appearance of the forest should be retained, and recreational infrastructure features should be introduced.	3.75	3.41	3.01

Table 4. Correlation between the selected criteria of ecosystem services and the criteria of scenic qualities by visitor income (U Mann–Whitney test for pairs of income groups).

	U Mann–Whitney Test		
	1 vs. 2	1 vs. 3	2 vs. 3
Criteria of ecosystem services			
Possibility of buying souvenirs	2.13 *	4.41 *	2.67 *
Possibility of hiring a guide	0.89	3.63 *	3.56 *
Tourist information in the media	0.34	4.20 *	4.62 *
Promotion	0.05	2.83 *	3.41 *
Involvement of the local community in running this type of place	-2.10^{*}	-1.02	1.59
Accommodation nearby or in the area	-1.12	0.38	1.58
Criteria of scenic qualities			
The current appearance of the forests should be preserved without conversion	-0.72	-0.09	1.26
The current appearance of the forest should be preserved with consideration of the species that historically occurred here	-0.17	-3.07 *	-3.78 *
The current appearance of the forest should be maintained with the addition of recreational infrastructure features	4.64 *	3.33 *	-0.19
The historic appearance of the forest should be maintained without the addition of recreational facilities	-0.96	-3.19 *	-3.26 *
The historic appearance of the forest should be retained, and recreational infrastructure features should be introduced.	2.24 *	4.02 *	2.92 *

* means that *p*-value < 0.05.

In addition, an analysis was made considering the reasons for visiting manor parks within different income groups. For all income groups, the most important reason was the interesting appearance of this type of park. In the case of people with the lowest income, this answer was indicated by more than 38% of people. For those with a medium

income, it was indicated by 51%. It was indicated by almost 58% of people with the highest income (results for individual reasons are presented as a percentage of people indicating a given answer in a multiple-choice question). The least often chosen reason for visiting the courtyard parks for those with the lowest and highest incomes was to learn about the history of the place (11% of Group 1 respondents and 8% of Group 3 respondents, respectively). For middle-income people, it was an interest in the greenery in such parks (25.52% of Group 2 respondents) (Figure 2).

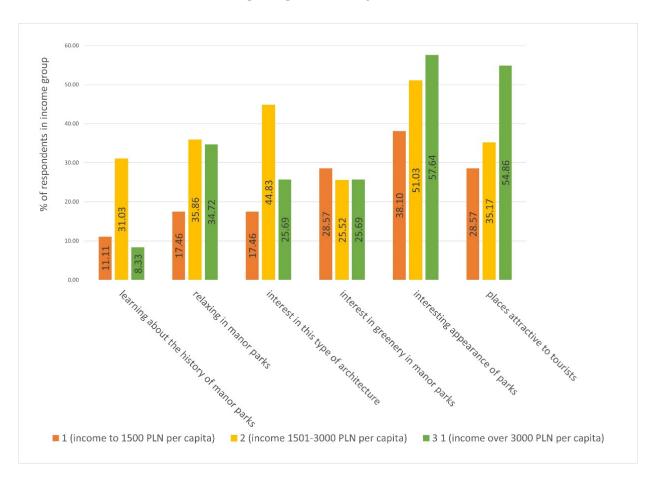


Figure 2. Comparison of the reasons for visiting manor parks based on per capita income.

To verify whether the results obtained are statistically significant between income groups, a Pearson's Chi2 test was performed for pairs of income groups. All the statistical values in the table marked with the (*) symbol correspond to statistically significant differences at the significance level assumed for the research. In the case of reasons for visiting manor parks, such as a desire to learn about history or an interest in this type of architecture, respondents with a medium income were statistically significantly more likely to give these reasons for visiting manor parks compared to the other two groups. Respondents with the highest income were statistically significantly more likely, compared to respondents with the lowest income, to state that they relax in manor parks, that they like their appearance and that they are attractive places for tourists. Additionally, compared to respondents with a medium income, people with the highest income were more likely to state that they like their appearance and that they are attractive places for tourists, while people with medium incomes, compared to respondents with the lowest income, were more likely to visit the manor parks for relaxation (Table 5).

	Chi ² Pearson Test		
	1 vs. 2	1 vs. 3	2 vs. 3
Reasons for visiting manor parks			
learning about the history of manor parks	9.30 *	0.41	23.52 *
relaxing in manor parks	7.04 *	6.28 *	0.04
interest in this type of architecture	14.19 *	1.66	11.58 *
interest in greenery in manor parks	0.21	0.19	0.00
interesting appearance of parks	2.95	6.70 *	1.27
places attractive to tourists	0.86	12.16 *	11.31 *

Table 5. Correlation between reasons for visiting manor parks by visitor income (Chi² Pearson test for pairs of income groups).

* means that the *p*-value < 0.05.

4. Discussion

Forests in manor parks provide many ecosystem services. Their importance is now especially important due to the current Covid-19 epidemic [29]. Forests are a place where leisure time can be spent safely. This is true for residents of small towns and large cities, and being in them provides residents with many physical, psychological and social benefits [30–32]. Moreover, they are open to the general public, and accessing them in Poland is usually free. Forests, due to their high level of biodiversity and their numerous ecological, social, protective and economic functions, should be subject to a comprehensive assessment for all the services they provide [33,34]. The authors of studies on manor parks have highlighted the significant role of manor parks in terms of ecological [35–37], social and landscape value [15], and there is also a considerable number of publications emphasizing the historical aspect of these sites [13,38]. Country parks are characterized by high historical values, linked to the tradition of the region [35].

In the present study, it was not possible to confirm hypothesis 1, meaning that the frequency of visiting the manor parks seems not to be influenced either by the relevance of the ecosystem services provision nor by their scenic quality. The frequency of visits to the forests depends on other factors, which may explain the results obtained in the study. Undoubtedly, it largely depends on the view itself, the nature of the forest or its attractiveness to visitors [34,39]. The results of the literature show that tourists choose recreation facilities with park-like features, and numerous features of small recreational architecture are willingly visited. This is also confirmed by the results of studies in forests around manor parks, which indicate that their historic appearance should be preserved. The introduction of features of recreational infrastructure is also an important issue. Studies [40,41] highlight the technical condition of recreational infrastructure as one of the most crucial factors influencing the development of tourism in forests. A different point of view is presented by the authors of studies whose results showed that tourists are more likely to indicate resting in forests without developed recreational infrastructure [42,43]. Dudek showed that [44] the demand for tourist-recreational infrastructure is higher in larger cities, and visitors mostly need features of recreational infrastructure for walking, cycling and running. For example, improving the visibility in the forest by removing vegetation that obscures the landscape increases its recreational value [41,43,45]. The amount and level of care for natural and historical features also influence the frequency of recreation, which is one of the reasons for spending leisure time in manor parks.

The present study fully confirmed hypothesis 2, meaning that the higher the income of visitors to manor parks, the higher the awareness in the case of scenic qualities and the higher the awareness of maintaining the historical value of manor parks. Finally, hypothesis 3 was also confirmed, meaning that the lower the income of visitors to manor parks, the greater the importance of other touristic promotion attractions (e.g., souvenirs, guided visits) in the decision to visit manor houses. This is also confirmed by Liu at al.'s [46] research, in which respondents paid attention to the well-preserved environment, the abundance of greenery, cleanliness, beautiful landscapes and peace. Concurrently, the

amount of "willingness to pay" depended on, among other things, their income and recreational and environmental amenities. A higher "willingness to pay" value has also been shown for people with a better understanding of the value of natural resources. Older people were more willing to pay a higher price than younger tourists because they appreciated the landscape more [47] regarding the value of the landscape [48].

The level of preference for recreation in forests depends on sociological characteristics [49] such as the income of respondents [50]. The wealthier the individual visitors, households or societies are, the higher the awareness of the role of forests as a place of recreation. In manor parks, the level of income influences the awareness of their historical value and the presence of additional tourist attractions in their area. In comparison, in forests in the Warsaw area, it was found that people with a higher income were more likely to visit natural forest areas (e.g., a strict nature reserve or a commercial forest without recreational infrastructure with recreational opportunities such as walking along paths and picking mushrooms and berries) [34]. At the same site, no such relationship was found for forests with refined recreational infrastructures. In comparison, research by Mäntymaa at al. [34,51] indicates that, for people with lower incomes, parks that provide many ecosystem services are a frequent recreational destination. They are particularly advantageous to them because of the free entry and proximity to housing [34,52]. Projects for the construction and upgrading of parks should address the improvement of recreational and historical values for specific social groups, taking into account their income [34,51,52].

5. Conclusions

Forests in manor parks provide a range of ecosystem services, as our survey results have shown. The importance of forests is particularly important due to the decreasing area of natural and semi-natural forest areas. In addition, forests played a priority role during the prevailing COVID-19 epidemic [29].

The results show that the level of awareness of scenic quality aspects in terms of maintaining their authentic character in the manor parks is influenced by the visitors' average household income. As the income increases, visitors' awareness of the natural and cultural aspects of the scenic aspects of the manor parks increases. At the same time, the involvement of additional features accompanying the tourist attraction increases as the income of visitors decreases, which means that, for people with lower incomes, the complexity of the tourist attraction becomes more important.

Research into the income-related preferences of visitors to country parks (manor parks) is pioneering/pilot research on these sites. Research in this area should be continued in other regions of the country, and the survey should include more detailed questions and criteria so that the results of the research will generate more detailed practical indications regarding the shaping/management of the manor parks by local municipalities and, at the same time, meet the expectations of respondents/users. The potential of manor parks is that they can form the basis for the creation of local tourism products.

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References

- 1. Kuszewska, K.; Fenyk, M.A. Różnorodność Biologiczna W Krajobrazie Rolniczym. Acta Sci. Pol. Adm. Locorum 2010, 9, 57-67.
- 2. Costanza, R.; d'Arge, R.; de Groot, R.; Farber, S.; Grasso, M.; Hannon, B.; Limburg, K.; Naeem, S.; O'Neill, R.V.; Paruelo, J.; et al. The Value of the World's Ecosystem Services and Natural Capital. *Nature* **1997**, *387*, 253–260. [CrossRef]
- 3. Mengist, W.; Soromessa, T.; Feyisa, G.L. A Global View of Regulatory Ecosystem Services: Existed Knowledge, Trends, and Research Gaps. *Ecol. Process* **2020**, *9*, 40. [CrossRef]
- 4. Walters, M.; Scholes, R.J. The GEO Handbook on Biodiversity Observation Networks; Springer Nature: Berlin, Germany, 2017.
- 5. Evers, C.R.; Wardropper, C.B.; Branoff, B.; Granek, E.F.; Hirsch, S.L.; Link, T.E.; Olivero-Lora, S.; Wilson, C. The Ecosystem Services and Biodiversity of Novel Ecosystems: A Literature Review. *Glob. Ecol. Conserv.* **2018**, *13*, e00362. [CrossRef]
- 6. Finlayson, C.M. Millennium Ecosystem Assessment; Island Press: Washington, DC, USA, 2005.
- Plieninger, T.; Dijks, S.; Oteros-Rozas, E.; Bieling, C. Assessing, Mapping, and Quantifying Cultural Ecosystem Services at Community Level. *Land Use Policy* 2013, 33, 118–129. [CrossRef]
- 8. Dorning, M.A.; van Berkel, D.B.; Semmens, D.J. Integrating Spatially Explicit Representations of Landscape Perceptions into Land Change Research. *Curr. Landsc. Ecol. Rep.* **2017**, *2*, 73–88. [CrossRef]
- van Berkel, D.B.; Tabrizian, P.; Dorning, M.A.; Smart, L.; Newcomb, D.; Mehaffey, M.; Neale, A.; Meentemeyer, R.K. Quantifying the Visual-Sensory Landscape Qualities That Contribute to Cultural Ecosystem Services Using Social Media and LiDAR. *Ecosyst* Serv. 2018, 31, 326–335. [CrossRef]
- Daniel, T.C.; Muhar, A.; Arnberger, A.; Aznar, O.; Boyd, J.W.; Chan, K.M.A.; Costanza, R.; Elmqvist, T.; Flint, C.G.; Gobster, P.H.; et al. Contributions of Cultural Services to the Ecosystem Services Agenda. *Proc. Natl. Acad. Sci. USA* 2012, 109, 8812–8819. [CrossRef]
- 11. Sudra, P. Usługi Ekosystemowe Na Tle Wybranych Koncepcji Ekologii Miasta. Człowiek I Sr. 2015, 39, 61–73.
- 12. Bennett, E.M.; Chaplin-Kramer, R. Science for the Sustainable Use of Ecosystem Services. F1000Res 2016, 5, 2622. [CrossRef]
- 13. Zachariasz, A. Dlaczego Warto Ocalić Dwór W Rajobrazie. O Ochronie Założeń Dworskich I Pałacowych Na Wybranych Przykładach Z Polski Południowej. *Topiarius Stud. Kraj.* **2017**, *2*, 194–213.
- 14. Latowski, K.; Zieliński, J. Parki Wiejskie—Wybrane Zagadnienia Geobotaniczne i Kulturowe. In *Szata Roslinna Wielkopolski I Pojezierza Południowopomorskiego. Przewodnik Sesji Terenowej*; Wojterska, M., Bogucki, E., Eds.; WydNaukowe: Poznań, Poland, 2001; Volume 52, p. 2428.
- 15. Fornal-Pienak, B. Wpływ Form Zagospodarowania Terenu Na Szatę Roślinną Parków Wiejskich i Ich Rola w Ochronie Różnorodności Biologicznej Krajobrazu Rolniczego w Południowej Polsce; SGGW: Warszawa, Poland, 2019.
- 16. Šantrůčková, M.; Demková, K.; Dostálek, J.; Frantík, T. The potential of Manor Gardens for natural habitats conservation. *J. Landsc. Ecol.* **2019**, *12*, 59–72. [CrossRef]
- 17. Ciszek, M. Społeczno-Kulturowe i Ekologiczno-Zdrowotne Funkcje Lasu. Stud. Ecol. Et Bioethicae 2021, 19, 57-69. [CrossRef]
- 18. Fornal-Pieniak, B.; Ollik, M.; Schwerk, A. Impact Of Surroundings Landscape Structure On Formation Of Plant Species In Afforestrated Manor Parks. *Appl. Ecol. Env. Res.* **2018**, *16*, 6483–6497. [CrossRef]
- 19. Taylor, C. Moat, Park, Manor House, Rectory, Palace and Village: Elements of the Landscape at Doddington, Cambridgeshire. *Landsc. Hist.* **2013**, *34*, 27–42. [CrossRef]
- 20. Parzych, S. Sector of Wood Biomass in Job Creation Process. Sylwan 2016, 160, 805-814.
- 21. Rosłon-Szeryńska, E.; Łukaszkiewicz, J.; Fortuna-Antoszkiewicz, B. Manor Parks in Poland—Costly Heritage or Potential for the Development of Rural Communes. *Sustainability* **2020**, *12*, 9422. [CrossRef]
- Glura, J. Wielofunkcyjne Leśnictwo Jako Element Dobrobytu Człowieka. In Zarządzanie Ochroną Przyrody w Lasach; Kannenberg, K., Szramka, H., Eds.; Wydawnictwo Wyższej Szkoły Zarządzania Środowiskiem w Tucholi: Tuchola, Poland, 2007; pp. 134–140.
- 23. Gołos, P. Społeczne Znaczenie Publicznych Funkcji Lasu—Pożądany Dla Rekreacji i Wypoczynku Model Drzewostanu i Lasu. *Leśne Pr. Badaw.* **2010**, *71*, 149–164.
- 24. Fornal-Pieniak, B.; Ollik, M.; Schwerk, A. Do Adjacent Forests Affect the Regeneration of Oak-Hornbeam and Ancient Forest Plant Species in Manor Parks in Poland? *Forests* **2021**, *12*, 538. [CrossRef]
- 25. Gawenda-Kempczyńska, D.; Paszek, I.; Załuski, T. Regeneration of vegetation in manor park in Laskowice (Dąbrowa Forest District). *Ecol. Quest.* 2017, *27*, 39–52.
- 26. Fan, M.; Xiao, Y. Impacts of the Grain for Green Program on the Spatial Pattern of Land Uses and Ecosystem Services in Mountainous Settlements in Southwest China. *Glob. Ecol. Conserv.* **2020**, *21*, e00806. [CrossRef]
- 27. Kai, M.A. Chan, Terre Satterfield, Joshua Goldstein, Rethinking ecosystem services to better address and navigate cultural values. *Ecol. Econ.* **2012**, *74*, 8–18. [CrossRef]
- 28. Narodowy Bank Polski Exchange Rates. Available online: https://www.nbp.pl/ (accessed on 19 September 2022).
- 29. Liu, S.; Wang, X. Reexamine the Value of Urban Pocket Parks under the Impact of the COVID-19. *Urban Urban Green* **2021**, 64, 127294. [CrossRef] [PubMed]

- Wan, C.; Shen, G.Q.; Choi, S. Eliciting Users' Preferences and Values in Urban Parks: Evidence from Analyzing Social Media Data from Hong Kong. Urban Urban Green 2021, 62, 127172. [CrossRef]
- Fang, X.; Gao, T.; Hedblom, M.; Xu, N.; Xiang, Y.; Hu, M.; Chen, Y.; Qiu, L. Soundscape Perceptions and Preferences for Different Groups of Users in Urban Recreational Forest Parks. *Forests* 2021, 12, 468. [CrossRef]
- Sirina, N.; Hua, A.; Gobert, J. What Factors Influence the Value of an Urban Park within a Medium-Sized French Conurbation? Urban Urban Green 2017, 24, 45–54. [CrossRef]
- 33. Baciu, G.E.; Dobrotă, C.E.; Apostol, E.N. Valuing Forest Ecosystem Services. Why Is an Integrative Approach Needed? *Forests* **2021**, *12*, 677. [CrossRef]
- 34. Mandziuk, A.; Fornal-Pieniak, B.; Stangierska, D.; Parzych, S.; Widera, K. Social Preferences of Young Adults Regarding Urban Forest Recreation Management in Warsaw, Poland. *Forests* **2021**, *12*, 1524. [CrossRef]
- Liira, J.; Lõhmus, K.; Tuisk, E. Old Manor Parks as Potential Habitats for Forest Flora in Agricultural Landscapes of Estonia. *Biol. Conserv.* 2012, 146, 144–154. [CrossRef]
- Fornal-Pieniak, B.; Ollik, M. Diversity of Flora in the Undergrowth of Park Afforestations, Rural Plantings and Oak-Hornbeam Forests. Folia For. Pol. Ser. A 2013, 55, 132–136. [CrossRef]
- Lõhmus, K.; Paal, T.; Liira, J. Long-term colonization ecology of forest-dwelling species in a fragmented rural landscape dispersal versus establishment. *Ecol. Evol.* 2014, *4*, 3113–3126. [CrossRef]
- Demetraki-Paleolog, A. Co-Financed by National Fund for Environmental Protection and Water Management. 2013. Available online: https://www.gov.pl (accessed on 19 September 2022).
- Mandziuk, A.; Stangierska, D.; Fornal-Pieniak, B.; Gębski, J.; Żarska, B.; Kiraga, M. Preferences of Young Adults Concerning the Pocket Parks with Water Reservoirs in the Aspect of Willingness to Pay (WTP) in Warsaw City, Poland. *Sustainability* 2022, 14, 5043. [CrossRef]
- Jankovska, I.; Straupe, I.; Brumelis, G.; Donis, J.; Kupfere, L. Baltic Forestry Urban Forests of Riga, Latvia—Pressures, Naturalness, Attitudes. Balt 2015, 20, 342–351.
- 41. Referowska-Chodak Management and Social Problems Linked to the Human Use of European Urban and Suburban Forests. *Forests* **2019**, *10*, 964. [CrossRef]
- 42. Skłodowski, J.W.; Gołos, P. Value of Leisure–related Function of Forest in View of the Results of Nationwide Survey in Poland. *Sylwan* **2016**, *160*, 759–766.
- 43. Eriksson, L.; Nordlund, A.M.; Olsson, O.; Westin, K. Recreation in Different Forest Settings: A Scene Preference Study. *Forests* 2012, *3*, 923–943. [CrossRef]
- 44. Dudek, T. Needs of the Local Population Related to Development of Forests for Recreational Purposes: Example of South-Eastern Poland. J. Sci. 2016, 62, 35–40. [CrossRef]
- Skłodowski, J.; Gołos, P. Przydatność Szlaków Turystycznych Oraz Elementów Infrastruktury w Świetle Wyników Ogólnopolskiego Badania Opinii Społecznej Usability of the Tourist Trails and Infrastructure Elements According to the Nationwide Public Opinion Survey. Sylwan 2016, 160, 238–246.
- Liu, W.-Y.; Lin, Y.-Y.; Chen, H.-S.; Hsieh, C.-M. Assessing the Amenity Value of Forest Ecosystem Services: Perspectives from the Use of Sustainable Green Spaces. *Sustainability* 2019, 11, 4500. [CrossRef]
- Chen, B.; Nakama, Y.; Zhang, Y. Traditional Village Forest Landscapes: Tourists' Attitudes and Preferences for Conservation. *Tour Manag.* 2017, 59, 652–662. [CrossRef]
- Chen, K.-L.; Kong, W.-H.; Chen, C.-C.; Liou, J.-L. Evaluating Benefits of Eco-Agriculture: The Cases of Farms along Taiwan's East Coast in Yilan and Hualien. Sustainability 2021, 13, 10889. [CrossRef]
- Dasgupta, R.; Basu, M.; Hashimoto, S.; Estoque, R.C.; Kumar, P.; Johnson, B.A.; Mitra, B.K.; Mitra, P. Residents' Place Attachment to Urban Green Spaces in Greater Tokyo Region: An Empirical Assessment of Dimensionality and Influencing Socio-Demographic Factors. Urban Urban Green 2022, 67, 127438. [CrossRef]
- Novikova, A.; Rocchi, L.; Vaznonis, B. Valuing Agricultural Landscape: Lithuanian Case Study Using a Contingent Valuation Method. Sustainability 2019, 11, 2648. [CrossRef]
- Mäntymaa, E.; Jokinen, M.; Louhi, P.; Juutinen, A. Visitors' Heterogeneous Preferences for Urban Park Management: The Case of a City Park in Oulu, Finland. Urban Urban Green 2022, 77, 127751. [CrossRef]
- 52. Tibesigwa, B.; Ntuli, H.; Lokina, R. Valuing Recreational Ecosystem Services in Developing Cities: The Case of Urban Parks in Dar Es Salaam, Tanzania. *Cities* **2020**, *106*, 102853. [CrossRef]

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