

Alleys - Monuments of Nature Element of the Rural Landscape

Zawadka JP*

Institute of Forest Sciences, Bialystok University of Technology, Poland

***Corresponding author:** Joanna Pietrzak Zawadka, Institute of Forest Sciences, Bialystok University of Technology, Poland, Tel: 85 682-95-00; Email: j.pietrzak@pb.edu.pl

Research Article

Volume 5 Issue 2 Received Date: July 10, 2020 Published Date: July 31, 2020 DOI: 10.23880/oajar-16000243

Abstract

Roadside alleys are an example of an extremely harmonious combination of culture and nature. They are an important element of the cultural landscape, a work of human hands derived from the palace (residential) culture. As a cluster of live trees that play an important role in the natural world, important as migration corridors and important refuges for many species of plants and animals. Roadside alleys are also a unique element of the rural landscape. For centuries they were planted not only for their aesthetic value, but also for practical reasons. emphasized the rank and prestige of access roads, determined the compositional axes of park and palace systems, indicated the route in winter. In addition, they were a source of fruit and wood, honey. They played important landscape functions, shielding them from the sun, wind or rain. The paper presents species diversity of alleys recognized as monuments of nature in Poland.

Keywords: Tree-nature monument; Roadside avenues; Podlasie nature; Nature monuments

Introduction

Alley usually means a road planted on both sides with trees. It can also be a representative street or pedestrian path in the park, usually planted on both sides with trees or bushes. Roadside trees have important landscape functions. They are values created in the past, they represent significant cultural values as do architectural works. Trees are part of material culture and testify to the natural and cultural separateness of society. Hence, one cannot ignore the fact that roadside trees - causing an aesthetic effect in landscape architecture - play an important role in the environmental education of society.

Along with the development of civilization, avenues of trees have become an integral part of the European landscape. The origin of these objects dates back to antiquity and continues until modern times, expressing the needs of "taming" nature as well as giving it functional features. The alleys emphasized the rank and prestige of access roads, determined the compositional axes of the park and palace systems, indicated the route in winter. In addition, they were a source of fruit and wood, honey. They played important landscape functions, shielding them from the sun, wind or rain.

There is no doubt that trees growing along roads are a threat to their users. In many countries, a lot of attention is paid to eliminate this situation. Solutions are sought that protect road users, with tree removal being the last resort. There are requests to cut down a historic tree avenue due to the widening of the road. However, no other solution is sought, which may be more difficult and expensive, but which will save these unique assumptions. They are not often inventoried or complemented trees in rows of avenues.

The paper presents the role of roadside avenues, protected as natural monuments, in the landscape. The focus was on what species were most often used for planting and what motivated the establishment of the alley are just examples of aspects that I touched on at work.

Current Criteria for Recognizing Trees as Nature Monuments

Currently, according to the nature protection law [1-3] nature monuments are specimens that stand out from others. They are individual creations of living and inanimate nature or their clusters, presenting a special natural, scientific, cultural, historical or landscape value. Specimens should have "individual characteristics, distinguishing them among other formations, stately sized trees, shrubs of native or foreign species, sources, waterfalls, wywierzyska, rocks, ravines, erratic boulders and caves" [4].

The concept of a monument of nature thus includes, when establishing the object, attention to a fairly broad definition, "natural, scientific, cultural, historical or landscape value" [4]. At the same time, it indicates that protected monuments of nature should have individual features that distinguish them from other creations, so they are impressive size trees, shrubs of native or alien species. This is understandable, because they should be unique and worthy of protection objects.

There is no information in the literature regarding the species diversity of alleys, considered as nature monuments and other forms of protection regarding the species richness of trees - nature monuments [5].

Material and Methods

The basis for the analyzes were the registers of nature monuments located in the Regional Directorates for Environmental Protection in each of the 16 voivodships (2017). Attention was paid to species diversity of specimens included in the avenue assumptions, which have significant value due to natural and cultural values.

Results

In 2018, 35020 nature monuments were included as monuments. 1926 monuments have increased since 2000, but 1212 have fallen compared to 2017. Among the monuments there are 27824 single trees, 4454 groups of trees, 744 avenues of trees, 1131 erratic boulders, 295 rocks, 41 caves and 531 other monumental forms (including 93 shrubs, 5 canyons and 163 springs, waterfalls and wywierzyska) [1]. According to the trees, 55.9 thousand avenues formed trees.

Of the 68 species forming the alleys, the most commonly planted tree species in these assumptions were deciduous species: linden, ash, oaks, maples, birches, less often elms, hornbeams and other rare species such as junipers or rowan. More rarely conifers (9 species) [6,7]. Species of trees were suited to the importance of trails - landowners emphasized the importance of the road leading to the residence, planting noble species – oaks or chestnuts (Table 1).

	Species of Trees Natural Monuments	Single trees
1	Tilia cordata L.	27884
2	Quercus robur L.	9200
3	Aesculus hippocastanum L.	3630
4	Carpinus betulus L.	2433
5	Fraxinus excelsior L.	1953
6	Acer platanoides L	1914
7	Fagus sylvatica L.	1734
8	<i>Betula pendula</i> Roth	1560
9	<i>Tilia</i> spp.	979
10	Tilia platyphyllos L.	853

Table 1: The most numerous tree species forming avenues-nature monuments in Poland.

Roads were also decorated by the inhabitants of villages and towns, planting more common species – lindens, ash, birch. Sometimes fruit trees grew along rural roads. Roads leading to the cemetery (as well as the cemetery itself) were planted with birches, thuja and thuja.

Conclusions

Roadside alleys are not only picturesque elements of the landscape. These are also important refuges for biodiversity. They consist of live plants and individual trees. Roadside trees are sometimes valuable specimens (monuments) of nature – just like even several hundred years old oaks or old lime trees. Planted in groups along roads, they form enclaves that are important for maintaining biodiversity. Of the 68 species that form avenues, 59 are deciduous and 9 coniferous.

Among the most important actions taken to preserve the landscape and cultural heritage of rural areas, the most frequently mentioned were: forms related to the protection of the natural environment (e.g. natural monument, landscape park), actions related to the conservation of palace and park complexes, entry in the register of monuments and creation of an ethnographic park.

References

 Dusza Zwolińska E, Gamrat R, Saran E (2018) Roadside tree-lined alleys in wolin commune open landscape. Part I, Folia Pomeranae Universitatis Technologiae Stetinensis 340(45): 5-18.

Open Access Journal of Agricultural Research

- 2. Krosigk K, Baumann M, Kirsch R, Stachańczyk R (2003) Aleje jako przedmiot działań konserwatorskich. Ochrona, zachowanie i odnawianie. Krajobrazy 1-2: 151-170.
- 3. Worobiec K., Liżewska I. (2009) Aleje przydrożne. Historia, znaczenie, zagrożenie, ochrona. Stowarzyszenie na rzecz Ochrony Krajobrazu Kulturowego Mazur Sadyba, Kadzidłowo-Olszyn.
- 4. Dziennik U (2004) Dn. U.16 kwietnia 2004 roku o ochronie przyrody 92: 880.
- Pietrzak J (2011) Metodyka i kryteria uznawania za pomniki przyrody drzew oraz określania ich klas wartości przyrodniczej i społecznej. Maszynopis rozprawy doktorskiej, Wydział Leśny SGGW, Warszawa.
- 6. GUS (2019) Ochrona środowiska.
- Szczepańska M (2014) Świadomość i aktywność społeczna w zakresie kształtowania i ochrony krajobrazu kulturowego obszarów wiejskich. Rozwój Regionalny i Polityka Regionalna 26: 135-148.

