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MODERN STRUCTURE OF BELARUSIAN POOZERYE FORESTS

The territory of Belarusian Poozerye has its geomorphological features that determined the history of the formation of the region. In the glacial period there were significant changes in the environment, which is reflected in relief, soil, climate and vegetation cover Poozerye. Currently, there is also the transformation of vegetation as a result of anthropogenic impacts on the forest.

Proposed southern boundary of the Poozerye with the geobotanical, physiographic, landscape and other complex natural and special zoning and given the division of forestry institutions of Belarusian Poozerye on geobotanical subzones, counties and districts.

To identify the features of the region were analyzed materials from the State forest inventory. The result revealed that the species composition of forest of Belarusian Poozerye differs from the average in the country. This region is dominated by small-leaved crops, which account for about 50% of the forested land. Birch plantations occupy 30.1%, but 79% of them are derivative. In terms of age classes dominated by middle-aged stands – 43.5%. In terms of value classes dominated highly value plantings – 83.1%, up 3.6% unproductive. The average yield class – I,8. On the territory of Poozerye dominated srednepolnotnye plantings – 64.8%. Average density of 0.7.

In the context of a series of forest types dominated by wood sorrel, the share of which is 15.8%, also occupy a significant share of bilberry (14.7%), mossy (14.3%) and ferny (12.5%). Slightly presented cowberry, herbal and nettle series of forest types (less than 1%).

Key words: Belarusian Poozerye, breed, age group, site class, completeness, forest type.

Introduction. The Belarusian Poozerye territory has its geomorphological features, which are predetermined by history of this region formation. During Ice Age, there were considerable changes in environment that resulted in a relief, soil, climate and vegetable cover of Poozerye. This region significantly differs from average geomorphological structure and species composition characteristics of vegetation in Belarus. The transformation of a vegetable cover in the result of anthropogenic impact on the forests is observed, at present.

Definition of the modern characteristics of Belarusian Poozerye forests will allow to plan forestry activity in the territory of this region.

Researches technique. During the researches, the materials of the State forest inventory of January 1, 2014, were used for structure analysis of Belarusian Poozerye forests. The southern boundary of Belarusian Poozerye was drawn.

Main part. From the analysis of existing special thematic and complex natural zoning, Belarusian Poozerye is the natural-historical of special environment region of the republic, its territory is accepted within the borders of the province “Belarusian Poozerye” (2001) according to physics and geography but taking into account geobotanical zoning [1].

The distribution of Belarusian Poozerye forestry enterprises by geobotanical subzones, districts and regions carrying out during researches in Belarus is shown in the Table.

From the geobotanical point of view, Poozerye belongs to the subzone of oak-dark coniferous for-

ests. The territory includes completely the West-Dvinsky and partially the North-West of Oshmyansko-Minsky and the North-East part of Orshansko-Mogilevsky districts.

The forests of West-Dwinsky geobotanical district, represented almost all Poozerye, make up 13.5% of the republic forests [2]. Species composition of Belarusian Poozerye forests nowadays looks like in the following way: the predominant are pine plantations, sharing 35.0% of the total forest cover area, being lot lower of average values in the subzone of oak-dark coniferous forests (41.5%). Birch plantings occupy the most considerable areas – 30.1% of the total forest cover area. However, the biggest share of them are birch wood derivatives – 79.0% of the total birch wood area. Fir plantations are also widely represented – 14.5%. Small-leaved plantings make up about 50% of the total forest cover area being very considerable as soils of this region are fertile and suitable for growing of higher productive and economic valuable species (Fig. 1).

In the West-Dwinsky geobotanical district, small-leaved plantings, share of which makes 54.9% also prevail, coniferous plantings occupy only 43.8%. At the same time in Oshmyansko-Minsky pine forests are predominant – 58.1% of the total district forest cover, in Orshansko-Mogilevsky district the maximum share of fir groves – 27.7% is observed.

The region distribution of forests on age groups showed that middle-aged plantings prevail – 43.5% of the region forest cover, ripe and overripe plantings occupy 14.7% (Fig. 2).

**Distribution of Belarusian Poozerye forestry enterprises by geobotanical districts,
and regions within oak and dark coniferous forests subzones**

Districts, regions	Forestry, forest areas
<i>I. West-Dwinsky district</i>	
1. Polotsky	Rossonsky, Verkhnedvinsky, Polotsky, Ushachsky, Dretunsky, Lepelsky (except Krasnoluksky and Staysky forest areas), Polotsky experimental educational, ELOX "Barsuky", Lepelsky military forest area of Krupsky military forestry
2. Surazhsky-Luchessky	Gorodoksky, Surazhsky, Lioznensky, Vitebsky, Bogushevsky, Beshenkovichsky, Shumilinsky, Klukovsky and Ocintorfsky forest areas of Orshansky forestry
3. Braslavsky	Braslavsky and Druysky forest areas of NP "Braslavsky lakes"
4. Disnensky	Disnensky, Postavsky, Gluboksky (except Gploubichskiy and Toumilovichsky forest areas), NP "Braslavsky lakes" (except Braslavsky and Druysky forest areas), Dvinsky ELB, ELOX "Braslav", KUP "Braslavselkhozls"
<i>II. Oshmyansko-Minsky district</i>	
5. Narochansko-Vileysky	NP "Narochansky", ELOX "Myadel", Ostrovetsky forest areas, Izhsky, Lubansky, Vileysky, Kostenevichsky and Narochansky forest areas of Vileysky experimental forestry, Vishnevsky, Zhodishkovsky, Smorgonsky, Salsky and Trilecinsky forest areas of Smorgonsky forestry
6. Verkhneberezhinsky	Berezinsky state reserve (except Zarechnoye and Paliksky forest areas), Krasnoluksky and Staysky forest areas of Lepelsky forestry, Goloubichsky and Tumilovichsky forest areas of Gluboksky experimental forestry, Celetsky forest area of Borisovsky forestry
7. Minsko-Borisovsky	Volkolatsky, Dokshitsky, Paraphyanovsky and Prudniks forest areas of Begomlsky forestry, Kholopenichsky forest area of Krupsky forestry
<i>III. Orshansko-Mogilevsky district</i>	
8. Orshansko-Pridneprovsky	Volosovsky and Oboletsky forest areas of Tolochinsky forestry, Obchugsky forest area of Krupsky forestry
9. Berezinsko-Drutsky	Celyavsky forest area of Krupsky forestry

Middle-aged plantings of hardwood broad-leaved species occupy 75.3%, and ripe and over-ripe – 0.6%.

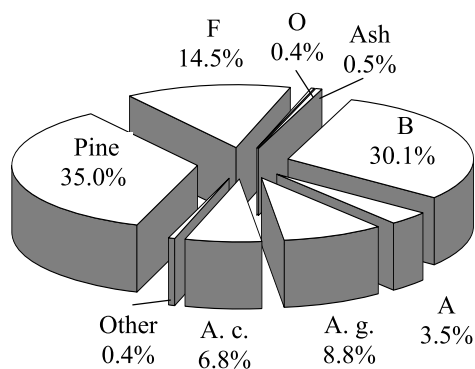


Fig. 1. Species composition of Belarusian Poozerye forests

The analysis of the afore-mentioned data says about pronounced variation of forest stands distribution on age groups that in a consequence can affect ability of plantings of the region to satisfy needs of the national economy in wood and other consumer wood utility.

The quality class is an indicator of plantings efficiency and therefore, the higher it is, the

more production is possible to receive from the unit of forest cover area. The distribution of Belarusian Poozerye forests on classes of quality is given in Fig. 3.

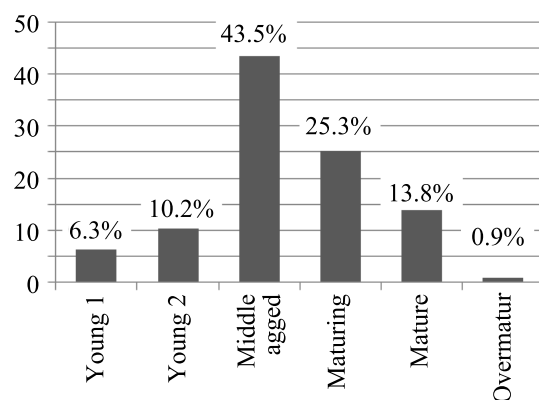


Fig. 2. Distribution of Belarusian Poozerye forests on age groups

Distribution of plantings of Belarusian Poozerye on classes of quality showed that plantings of the I quality class prevail. Thus, high quality class plantings occupy 83.1%, unproductive – 3.6%. The middle quality class is equal to 1,8.

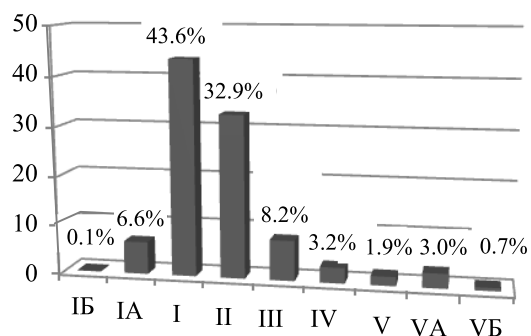


Fig. 3. Distribution of Belarusian Poozerye forests on classes of quality

Average degree of plantings density of Belarusian Poozerye corresponds to average values of the republic forest stands and makes 0.70.

In this region, plantings with degree of density 0.7 make 43.3%. The stands of average density prevail – 64.8%, those of high density occupy 27.1%.

Plantings density distribution of Poozerye is given in Fig. 4. The forest type is an important indicator of forest taxation conditioned by the soil and climatic conditions.

The forest type determines species composition of vegetation growing on this area, and its productivity. Fig. 5 gives distribution of Belarusian Poozerye forests on series of forest species. In the context of forest species series, oxalis prevail, the share of which makes 15.8%, as well as a considerable proportion is taken to bilberry (14.7%), mossy (14.3%), and fern (12.5%) forest species series. Red bilberry, streamlet-grassy, and nettle ones are format in minor – no more than 1%.

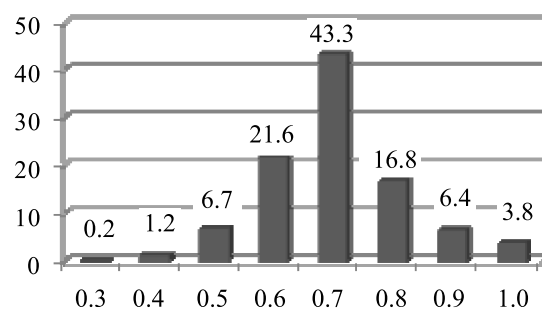


Fig. 4. Plantings density distribution of Poozerye

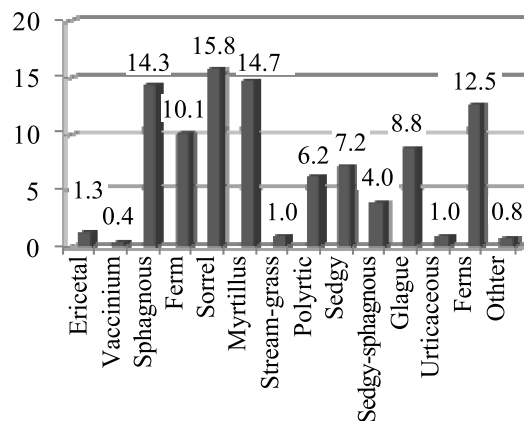


Fig. 5. Distribution of Belarusian Poozerye forests on series of forest species

Conclusion. The abovementioned information states, that Belarusian Poozerye is a reserve for formation of high efficient economic valuable plantings by changing of small-leaved planting species into coniferous and hardwood broad-leaved stands in rich growing conditions.

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