

FORESTRY DEVELOPMENT IN NORTH AZOV SEA REGION

Associate professor, PhD (History) L.I. Polyakova¹

Associate professor, PhD (History) S.I. Pachev²

Associate professor, PhD (History) A.V. Zamuruysev³

Associate professor, PhD (History) N.A. Schkoda⁴

Post-graduate student (History) K.O. Zhiryakov⁵

¹Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol, **Ukraine**

²Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol, **Ukraine**

³Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol, **Ukraine**

⁴Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol, **Ukraine**

⁵Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol, **Ukraine**

ABSTRACT

Formation of anthropogenous forest landscapes in the territory of North Azov Sea region can subdivide into 4 stages:

The 1st stage – (the Cenozoic – the XIV century) – formation of natural forest and forest-steppe landscapes of the region.

The 2nd stage (the XIV-XVIII century) – the beginning of large-scale data of forests the nomadic people (construction of dwellings, deforestation for the purpose of creation of pastures and a plowed land), occupying the territory of the region of research.

The 3rd stage (the XVIII-XIX centuries) – formation of artificial silvicultural landscapes of area (a laying of large forests – forest areas: Altagirsky and Berdyansk plantations), because of sharp shortage of wood for economic activity of the person.

19 – the beginning of the 20th century is characterized by the beginning of afforestation in the North Azov Sea region and its distribution across the territory. Various people living in the considered territory were engaged in afforestation. One of leading roles in it was played by Mennonites.

Already in the early years of Mennonites at the Molochna River at some colonies were planted public plantations of mulberry trees. However, they were lost because of little time to look after and the harsh winter of 1812» And subsequent attempts to create public plantations failed. «Review of the state of the colonies in the Department of Ekaterinoslavskaya bureau foreign settlers in 1829» testified the absence of public fruit plantations, forest and mulberry trees at Mennonite Molochna District.

Unsuccessful experience of social forestation in the early years of Mennonites on the river Molochna led to the cultivation of forest trees on private farmsteads.

Forest trees, are widely used in households of Mennonites in the initial period of stay in the Molochna river were willow and mulberry, as evidenced by the statement of the number of trees of forest species in the Mennonites colonies at Molochna.

The positive experience of growing trees forest trees on personal farmsteads Mennonites led attempts to return to the organization of public plantations. This was facilitated by visiting Molochna Mennonites in 1825 by Emperor Alexander I, who expressed a desire to be «established plantations, especially of American acacias, very successful in those places growing at ½ des. on the owner».

In the early 1830-s at Mennonite colonies has begun an active organization of public forest plantations. For these purposes, Mennonites were founded «Society for the dissemination of forestry, sericulture and winery» In the colonies were allocated areas in which each owner had planted 0.5 des of forest trees.

Development of afforestation was promoted by its positive influence on character of a natural situation (temperature condition, moistening, etc.), possibility of development of economy (silkworm breeding), strengthening of a landscape variety.

INTRODUCTION

Formation of anthropogenous forest landscapes in the territory of North Azov Sea region can subdivide into 4 stages:

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The 3rd stage (the XVIII-XIX centuries) – formation of artificial silvicultural landscapes of area (a laying of large forests – forest areas: Altagirsky and Berdyansk plantations), because of sharp shortage of wood for economic activity of the person.

The 4th stage (XX century – our time) – the coastal plantings, green zones, antierosion, field-protecting and roadside landings representing difficult connections of artificial landings of forest trees and radically the changed remains of natural forest vegetation. Our research concerns the third period.

Insignificant forestation of Taurian area has attracted attention of the government just after its accession to the Russian Empire.

As early as February 1786, Prince Grigory Potemkin ordered the governor of Taurian area V.V. Kakhovsky «to encourage villagers to breeding gardens and forests and to teach them of all the necessary instructions» [14]. By his errand Potemkin prefaced the decree of Catherine II from June 10, 1787 given to him as Yekaterinoslav Governor-General. The Decree states: «For breeding and multiplying of forests in the steppes of the Ekaterinoslav and Taurian provinces (gubernia), wills to you used your efforts on planting and sowing specially of those in state and private forests lands, typical of lane to that in which these provinces and regions are» Decree provides also some monetary encouragements for forestry: «We allow giving some money rewarding those who are soon and more to sow and planting forests will be successful; on these rewarding and

costs for planting and sowing at state-owned lands will order to pay from the Cabinet of 10,000 rubles in the future 1788».

And in the future wood cultivation was under the custody of government.

- July 8, 1843 Nicholas I approved the opinion of the State Council to grant loans for the «Cultivation grove and forests in the steppes areas».
- January 19, 1876 Alexander II signed a decree «On the establishment of awards for the efforts and successes in forest cultivation and forest arrangement», which establishes monetary awards, gold and silver medals for private landowners, individual farmers and rural communities [13].

METHODS OF RESEARCH

Our research proceeds. Fonds of Russian State Historical Archives and The State Archives of Zaporizhia oblast, literature of the 19th century (reports, articles about afforestation) contain the data about methods of tree planting, specific structure of afforestations, data on foresters, economic plans of forest land, materials about plant beds and wreckers.

DISCUSSION

The Mennonites were the most active in the implementation of the government's plans for afforestation of the Tauride steppes. Since the organization of the colonies on Molochna, planting trees at private farms has been reading. Already in 1812, in the colonies of the Molochna Mennonite District there were: 20426 willows, 94 poplars and 11761 mulberries [3]. The cultivation of mulberry had a practical interest – cultivation of the silkworm, whose cocoons were sent for further processing in the Khortitsky colonies [10].

As the settlement moved, the number of trees in the colonies of the Mennonites increased. On January 1, 1828 in the gardens of the owners there were: 86164 forest trees and in addition 3732 mulberry trees. On January 1, 1929 – 109383 and 4200 respectively [4].

Mennonites also engaged in afforestation on privately owned farms. So, in 1828, a plantation was laid on the left bank of the Tokmak River in the estate of Reimer Felzental. In 1846, forests began to grow in the open steppe on the estate [8].

In 1831, a forest plantation in his estate Yushanly was laid on an area of 6 acres by I. Cornies. In the early 50s, already under F. Vibe, the area of forest plantation was 29.5 acres. The total number of trees in the nurseries and on the plantation was 171700. In 1851 from the sale of trees was received 1340 silver rubles [9]. Wood was bought for the production of furniture, agricultural tools, carts, household utensils, construction of fences and houses, for firewood [5].

In 1844, near Molochna liman (estuary) in the tract of Altagir (Melitopol district) by David Cornies was founded plantation of sharp-leaved willow (shelyuga) in order to secure the shifting sands. By 1850 at plantation perfectly taken root the mulberry, poplar, birch, pine, white acacia, elm, ash, maple, hawthorn, juniper and trubkotsvet. At

plantations functioned factory for bust mat from the bark of sharp-leaved willow (shelyuga) with annual output of 500 rubles [8]. In the early 1860-ies the forest plantations of D. Cornies occupied 50 des. It marked the beginning of Altagirsky forestry [5].

Areas with forest vegetation were in other privately owned farms, as evidenced by archival sources. Thus, according to the law of February 2, 1915, in liquidation lists were made forest plantations: In the Melitopol district I.I. Cornies (15 des.), I.P. Janzen (4 des.), O.I. Neufeld (10 des.), M.I. Janzen (5 des.), A.D. Zuderman (15 des.), I.F. Wiebe (6 des.)

In Berdyansk district – G.A. Klassen (6 des.), I.J. Schmidt (3 des.), D.Y. Schmidt (15 des.), Y.Y. Zuderman (20 des.), G.G. Enns (1 des.) G.G. Vince (35 des.) [2].

Already in the early years of Mennonites at the Molochna River at some colonies were planted public plantations of mulberry trees. However, they were lost because of little time to look after and the harsh winter of 1812» [10]. And subsequent attempts to create public plantations failed. «Review of the state of the colonies in the Department of Ekaterinoslavskaya bureau foreign settlers in 1829» testified the absence of public fruit plantations, forest and mulberry trees at Mennonite Molochna District [4].

In the early 1830-ies at Mennonite colonies has begun an active organization of public forest plantations. For these purposes, Mennonites were founded «Society for the dissemination of forestry, sericulture and winery.» In the colonies were allocated areas in which each owner had planted 0.5 des of forest trees [12]. As reported to the Society of Agriculture of Southern Russian by Chairman of Molochna Mennonite community Mr. Wiebe, laying public forest plantations in Molotchna began in 1831 [8].

In 1842, there were already 39 forest plantations in Molochna district, with a total area of 428.5 acres, of which 162 were planted 2039 sazhen. During 1842, 47209 forest trees and 31308 mulberry trees were planted in the plantations. In addition, 62811 mulberry trees were planted in hedges separating semi-decimal blocks. In the nurseries there were 434993 trees of various deciduous and coniferous species and 126325 mulberries. In total, in 39 plantations, at the end of 1842, there were 245856 forest trees and 144983 mulberries, besides, there were 243848 trees in the hedges separating the half-acres. Outside the plantations «on lowlands and downhill» there were 48113 trees. In 1842, the 40th plantation was established in the colony of Shparrau and work was carried out for forest cultivation [15].

RESULTS

In the process of expansion of the area under forest stands Molochna colonies observations were made of the impact of tree plantations on the other components of nature, as well as elaborated methods of rational forestation. This is evidenced by a report on the state of the economy of the Molochna district in 1842, in which he wrote: «The favorable results of sowing and planting of forest trees led to the belief that it is possible to separate the forest, not only in the lowlands, but the bare steppes. Plantation forests at higher elevations improve air, grain fields serve as protection from the cold and hot winds, and that the mix different forest species, the better at the plantation. Most useful in their area to plant plantations is not a wood, but to sit down together, oaks, lindens, etc. If a breed is not growing as quickly as the others, it does not harm the

case, on the contrary, it raises the value of another neighboring species; heterogeneous tree leaves fertilize the land better than one leaves some breeds; and diverse forest plantations security against wind gusts and snow accumulations; observed as well that the insects more damage leaves from one plantation forest species than mixed stands ...» [15].

In 1843, the inhabitants of the colonies Tighe and Blyumenort were planted trees along the road between the colonies. That was the beginning of planting trees along the roads in the Molochna. In subsequent years, was supposed to land on both sides of the post road, which for 32 kilometers ran through the District. It was also decided to plant all the possible roads between the colonies. Later planting of trees were conducted along roads that linking the individual estates. So, when visiting the village Kalinovka Azov region in the year 2000 its resident Timothy Danilovich Bobrowski (born in 1912) said that before the 1917 revolution along the road between the estates of Dick and Zudermana on Appanly, growing trees, lilacs and tulips.

In 1843, by the residents of the colony Orlovo was the beginning of work on the creation of the «green hedges» (a prototype of modern tree belts). For this purpose, the colonists Orlovo has been allocated about 100 dessiatines of arable land. Selected area was divided into sections, which were to be planted with trees (green hedges) of mulberry. Report on the state of farms in the Molochna Mennonite colonies in 1843 recorded the beginning of work on the creation of «green hedges» [11].

Rather quickly the colonists were convinced that «green hedges» in the open steppe bring a rather large favor. And as wrote I. Cornies in 1845, «As a result of this belief, the colonists have had the idea to enclose the fields mentioned hedges that are in the vicinity of the colonies».

In 1841, during the inspection of forest plantations in the colonies of Mennonites, Minister of State Property, Count Kiselev requested to Mennonite famous Johann Cornies to choose a place for laying exemplary of forest plantations in order to «teach person practically peasant boys arboriculture and gardening, and through it, as well as the release of plantation forests and fruit seedlings, extend forestry and garden in the villages of the state peasants» [7].

By Johann Cornies was selected area on the left bank of the Molochna River. In 1845, under the broad ditch the digging was allocated 108 dessiatines, part of which was plowed and prepared for planting. The first tree of future forest was planted in April 4, 1846. Seedlings were brought by Johann Cornies from own tree beds in the estate of Yushanly. That was the beginning of the contemporary Old-Berdyansk forestry. The presence in the title the words «Berdyansk» explains its location in Berdyansk uezd, because a boundary between last and Melitopol county runs along the river Molochna [7].

Afforestation on a new Berdyansk plantations spends quite intensively as reflected in the annual reports of the Tauria governor:

- 1846 there are «already alley from different trees for a mile ... All trees planted in the spring of 4392; in autumn frosts prevented planting»;
- 1847 has 6,000 trees and 2100 were planted in autumn 1847;
- 1848 planted 17,444 trees;

- 1850 it was planted 96754 trees, but because of earlier planted «27130 trees destroyed by drought and damaged with caterpillars to such degree that all these trees were lost» [7].

From 1846 in forestry boys began the training forestry. At the beginning of the training lasted 5 years, later training period was extended to 6 years. During this period, they will not only gain the knowledge and skills of forestation, but also in agriculture, horticulture, sericulture, tobacco growing. In winter, they learned to read, write and count [8].

CONCLUSION

19 – the beginning of the 20th century is characterized by the beginning of afforestation in the North Azov Sea region and its distribution across the territory. Various people living in the considered territory were engaged in afforestation. One of leading roles in it was played by Mennonites.

In the summer of 1852, there were 79770 trees of 38 species in Berdyansk Plantation (without seedlings). Of these, forest – 70259, mulberry – 8734 and fruit – 777 [6]. From the first years of its existence, Berdyansk Plantation became a supplier of planting material. In 1851 22456 seedlings were sold, and in the spring of 1852 already 80,362 ones [6].

Since 1846, forestry began teaching forestry in forestry. At the beginning, the study lasted 5 years [1], later - 6 [23]. During this period, they not only obtained knowledge and skills in afforestation, but also in agriculture, sericulture, tobacco growing and gardening. In winter, they learned to write, read, and count. Development of afforestation was promoted by its positive influence on character of a natural situation (temperature condition, moistening, etc.), possibility of development of economy (silkworm breeding), strengthening of a landscape variety.

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