

FEATURES OF REPRODUCTION OF THE FORESTS OF EAST POLESYE

A. N. Zhezhkun

State Enterprise «Novgorod –Severska Forest Research Station” of URIFFM

Entry.

Renewal of forests is carried out to achieve optimal forest cover percent, improving the quality of stands composition, increase of their biological resistance and productivity, improving protective and other useful properties of forests and protective plantation. The most common methods of renewal of forests in the Eastern Polesie is restoration of forest and reforestation.

Before the forests regulation (1842), the renewal was performed in a natural way. Artificial restoration on felled areas by state forest districts of Chernigiv region commenced in 1844. In the late nineteenth century were to start work on the fixation and afforestation of gullies. The volume of reforestation in the twentieth century gradually grew. In the 70 years the main method of felling was made solid with the subsequent creation of forest cultures. After the formation of the independent Ukrainian state forestry focused on the principles of sustainable development and environmentally oriented forestry. Fellings and reforestation of the Eastern Polesie was funded from own funds of the forestry enterprises. Using the difference of plant capacity of forests in enterprises has formed different levels of reforestation, provision of machines and mechanisms, the number of workers and the like.

Research objective – to determine the amount and to study the peculiarities of the technology of reproduction of forests in the Eastern Polissya of Ukraine.

Materials and methods research.

The volume of restoration of forest and reforestation in Eastern Polesie is taken from 10 of the forestry enterprises of Chernihiv regional Union, 4 enterprises of Sumy regional Union, 1 enterprise Kyiv regional Union and State Enterprise «Novgorod – Severska Forest Research Station” of URIFFM.

Research in the areas of recovery and cultivation of forests are conducted using permanent sample plots. As the viability of the young trees were divided into 5 categories: no signs of weakening, weak, very weak, dry and dead. Quality assessment of silvicultural objects was carried out by regulatory and guidance documentation.

The results and conclusions.

The volume of reforestation in state forest enterprises of the Eastern Polesie in 2012-2013 was 3.3 to 5.4 thousand hectares. The proportion of restoration of forest comprised 78– 91 % of the total volum renewal. In recent years the volumes of reforestation reduced due to the reduction of the area of land transferred under afforestation.

Restoration of forest and reforestation are mainly artificial method. In the Fund Restoration of forest in breed composition is dominated by forest plantations dominated by Scots pine (83– 87 %) and oak (8-10 %).

Natural regeneration felled areas in certain forest conditions are mainly by common alder, aspen, and silver birch.

Reforestation is carried out on degraded and low-value lands. As stand composition of the new forests dominated by forest plantations of Scots pine (77-87 %),

common alder (4-8 %), oak (2-11 %), silver birch. Reforestation occurs naturally in certain forest conditions are mainly by crack willow, common alder and Scots pine.

Forest plantations established for the last 20 years, is mainly pure composition. Pure forest plantations of Scots pine are damaged by the larvae of cockchafer and affects root sponge. They are more damaged by birds, wild animals, suffer from droughts as compared with cultures of mixed composition. Therefore, in recent years forest culture are created of mixed composition.

During the 2011-2012 created more than 60 hectares of research forest plantations by seedlings with open and closed root systems and by seeds. To conserve biodiversity under the natural regeneration are abandoned land area of up to 1.0 ha.

For the first 1-3 years of the growth of forest plantations of the restoration of forest Fund is somewhat higher survival rate (88-92 %) than culture Fund reforestation (84-90 %). Forest plantations of Fund the forest restoration in 2013 had a median quality score was 1.62, and the Fund reforestation is even slightly higher (1,43). The deterioration in the quality of forest plantations created in felled areas, are mainly due to their oppression by the secondary rocks in comparison with cultures established on degraded and low-value lands reforestation Fund.

The average quality class of forest plantations, translated in wooded lands in the Fund restoration of forest is also slightly lower (1,83) than in the reforestation Fund (1,39). In recent years the quality of forest cultures of Eastern Polesye are improved.

K e y w o r d s: restoration of forest, reforestation, forest plantations, natural restoration, quality of forest plantations