## Sanitary State in Drained Pine Stands of the Middle Ural

**S. Zalesov** – Ural State Forest Engineering University Pro-Rector on Science, Chef of Forestry Department, Professor, Doctor of Agricultural Sciences, Ekaterinburg, Russian Federation, zalesov@usfeu.ru

**V. Tukacheva** – Ural State Forest Engineering University, Postgraduate Student of Forestry Department, Ekaterinburg, Russian Federation, anastasia.tukacheva@usfeu.com

Keywords: pines forests, sanitary state, draining amelioration, drained forest stand, class of growth Kraft. On the base of 5 permanent quadrates sanitary state of drained serge-cowbrush, ledum, cowbrush-logmoss pine stands of various forest types have been analyzed [1, 2]. It is noted that in all above mentioned forest types for the whole 29 years when they were subjected to the influence of amelioration action accumulation of a considerable amount of dead trees has taken place; their share constitutes 18,9-32,6% out of the whole quantity; the share of the current year do not exceed 4,3-14,4% as concerns their depth. All the above mentioned testifies the worsening of the forest stands sanitary state. As a whole the average-weight index of sanitary state depends on forest type and medium age at the moment of drying, the index is varying from 2,4 (ledum pine stand) to 2,6-3,5 (cowbrushlogmoss pine stand) and 2,5-2,6 (serge-cowbrush pine stand). Our investigations have shown that practically on all the permanent quadrates the most part of «wealthy» and «weakened» category is concentrated in the neighborhood of drying canal (66,0-91,3%). Those stands growing in intercanal space are represented less amount of dead trees «wealthy» and «weakened» but larger amount of dead trees. The process of natural stand depletion proceeds according to on account of depressed forest thinners part of the tree. The participation share of dead trees by step thickness is decreasing with trees diameter increasing, but it (dead trees stands) is represented in every step thickness that testifies high index of occurrence (from 56,3-100%). We suppose the sanitary state of dried pine stands investigations in conditions of the Middle Ural deserves serious attention and further deep and detailed studying.

## References

- 1. On the rules of sanitary security in forests: Resolution of the Government of the Russian Federation of 20.05.2017 № 607.
- 2. Lugansky, N. A. Forest Science / N. A. Lugansky, S. V. Zalesov, V. N. Luganskiy. Ekaterinburg : Urals. State Forestry University, 2010. 432 p.

**84** 2018 № 2