

**DYNAMICS OF DIVERSITY AND PRODUCTIVITY  
OF ALAS WET MEADOWS IN CENTRAL YAKUTIA**

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SUMMARY

This paper presents the results of long-term stationary researches of wet meadow phytocenosis by the example of IBPC SB RAS model alas. The purpose of the study was the analysis of dynamics of diversity and productivity in alas wet meadows habitats in a long-term cycle.

Researches were performed in 1988—2012 in registration sites of alas wet meadow belt. These communities were arisen around the lake on over-humidified alas peaty-gley soils and on lacustrine organic-mineral deposits. The method of trial areas and Braun-Blanquet ecology-floristic method was used. Descriptions were done for the area of 5 m<sup>2</sup>. The size of above-ground biomass of a grass stand was estimated with the method of registration sites of 1m<sup>2</sup> in 4-fold repeatability in an air-dry condition.

The following features of dynamics of diversity and productivity of wet meadows were revealed.

- 1) During natural weather fluctuations in the Central Yakutia, the area of alas wet meadow belt varied greatly.
- 2) Abrupt lake expansion caused drop out of wet meadows from alas ecosystems spatial structure.
- 3) The plant species composition of the wet meadow varied considerably during period of survey.
- 4) Productivity of the wet meadow tended to increase in 1988—2005.

An average productivity of wet meadow phytocenosis was  $31.1 \pm 4.1$  c/ha.

**Key words:** diversity, productivity, wet meadow, alas, Central Yakutia.