



ECOSYSTEM OF A MESOLIGOTROPHIC PEATLAND IN NORTHWESTERN RUSSIA: development, structure, and function

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Ecosystem of a mesooligotrophic peatland in northwestern Russia: development, structure, and function. Syktyvkar. 2016. 172 p. (Komi Scientific Centre of the Ural Branch of the Russian Academy of Science)

The book provides data on a boreal mesooligotrophic peatland Medla-Pev-Nyur located in northwestern Russia. Research on the development of the peatland in Holocene and peat accumulation rates at different microforms are presented. Results of the studies on land cover and diversity of micromycetes in peat are reviewed. Another important topic of this book is turnover of greenhouse gases. We show results of carbon storage mapping and discuss CO₂ and CH₄ fluxes between peatland and atmosphere measured by different methods. Processes of methanogenesis and CH₄ oxidation in peat layer of different microforms in peatland Medla-Pev-Nyur are illuminated as well as diurnal and seasonal variations of energy and water balance of the peatland.

The book is addressed to professionals and students in the fields of biology, ecology and biogeochemistry.

Экосистема мезоолиготрофного болота на северо-западе России: эволюция, структура, функции. Сыктывкар, 2016. 172 с. (Коми научный центр УрО РАН).

В монографии представлены результаты исследований мезоолиготрофного болота Медла-Пэв-Нюр на северо-западе России. Приводятся данные о развитии болота в Голцене и скорости накопления торфа в разных микроландшафтах. Содержится характеристика растительного покрова и разнообразия микромицетов в торфе. Обсуждаются результаты картирования запасов углерода и измерений обмена CO₂ и CH₄ между болотом и атмосферой, выполненные разными методами. Рассматриваются процессы метаногенеза и метаноокисления в слое торфа на разных участках болота, а также суточная и сезонная вариабельность показателей энергообмена в приземном слое атмосферы.

Книга предназначена для специалистов и студентов в области биологии, экологии и биогеохимии.

Reviewers

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Conservation and sustainable management of peatlands in Russia to minimize carbon emissions and help ecosystems to adapt to climate change.

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