Przegląd Przyrodniczy
XX, 3-4 (2009): 43-53

Maria Herbichowa*, Paulina Ćwiklińska, Agnieszka Sadowska*****

RESTYTUCJA ROŚLINNOŚCI TORFOWISKOWEJ PO PRZEMYSŁOWYM WYDOBYCIU TORFU – ZAŁOŻENIA, DOTYCHCZASOWE DOŚWIADCZENIA I WYNIKI

Restoration of bog flora in former peat excavation areas: assumptions, previous experience and results

Abstract

The experimental restoration of bog plant species in post-excavation field has been carried out in Czarne Bagno bog since 2006 with financial support from European Union and the Fund for Environment Protection and Water Management in Gdańsk. The first action involved blocking water outflow from the bog. The area for plant transplantation was prepared by removing the upper layer of mineralized peat. In the so prepared area the diaspores of seven *Sphagnum* species were spread manually and covered with straw in order to avoid desiccation, freezing and being blown away. The experimental plots for six vascular plant species were also established. The water level fluctuations and the cover/shoot number of transplanted species as well as the spontaneous establishment of other bog plants are monitored. The cover of most *Sphagnum* species in experimental plots did not exceed 15% in 2008. The best regeneration was observed in case of *Sphagnum cuspidatum*. The most important for efficient development of bog plants is maintaining high water level and the application of protective straw layer. The species used in restoration should be relatively resistant to desiccation. Preliminary results show that the method used helps to prevent further habitat degradation and gives a possibility for regeneration of bog plant cover in formerly milled parts of bogs.

KEY WORDS: post-excavation fields in vacuum-mined bogs, restoration of bog vegetation, peatland conservation, *Sphagnum*

Wstęp

Spontaniczna regeneracja roślinności na torfowiskach wysokich, zdegradowanych wskutek frezerowej eksploatacji torfu, następuje w bardzo ograniczonym stopniu. Warunki abiotyczne, panujące w obrębie rozległych wyrobisk poeksploatacyjnych, hamują