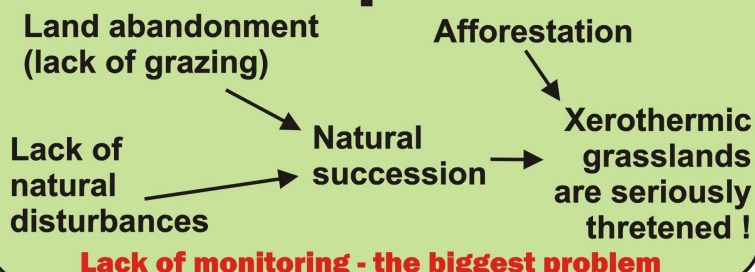


The 45-year changes in calcareous xerothermic vegetation in Lower Odra river valley (NW Poland)

Katarzyna Barańska, Department of Environmental Botany, University of Warsaw, Warsaw, Poland & Naturalists Club, Świebodzin
Michał Dąbrowski, Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland & Naturalists Club, Świebodzin
Michał Zmihorski, Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland & Naturalists Club, Świebodzin
E-mail: kasia_baranska@interia.pl

1. The problem



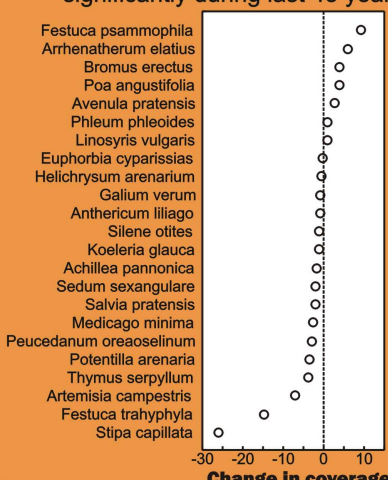
2. Study area & methods

- * NW Poland, Odra River valley
- * Datasets from 1960 & 2005-08
- * Braun-Blanquet relevés
- * Data from 37 plots, 25 m² each
- * Statistics (mean coverage, similarity analysis, rarefaction)



3.1. Winners and losers

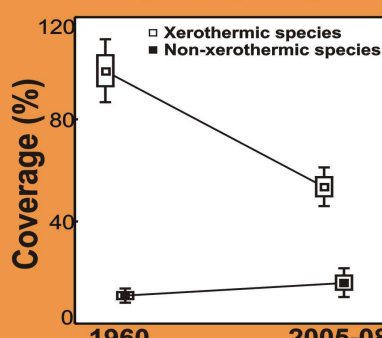
Mean coverage of several species on the studied plots changed significantly during last 45 years



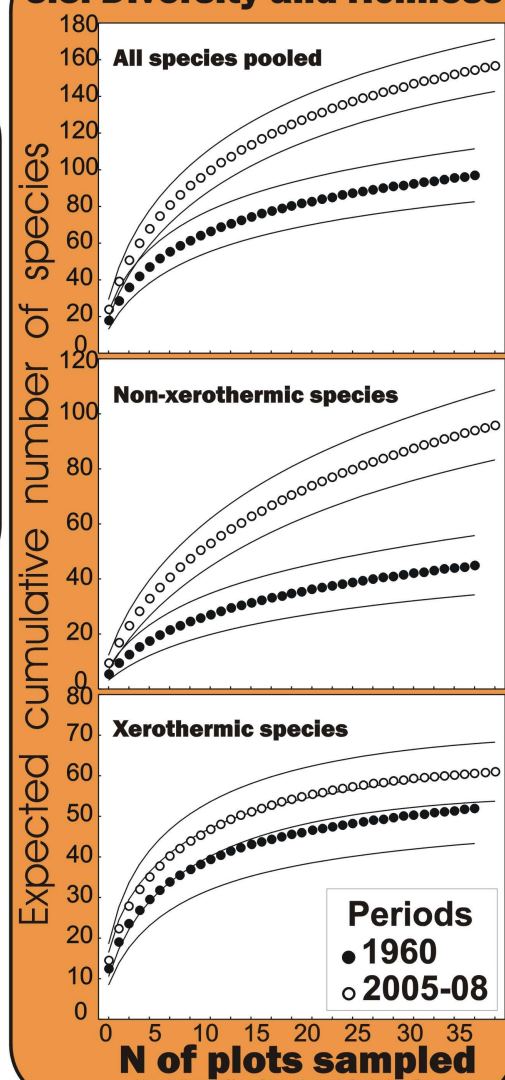
3. Results

3.2. Changes in plant coverage

Mean coverage of xerothermic species decreased, while that of non-xerothermic increased significantly during the study period

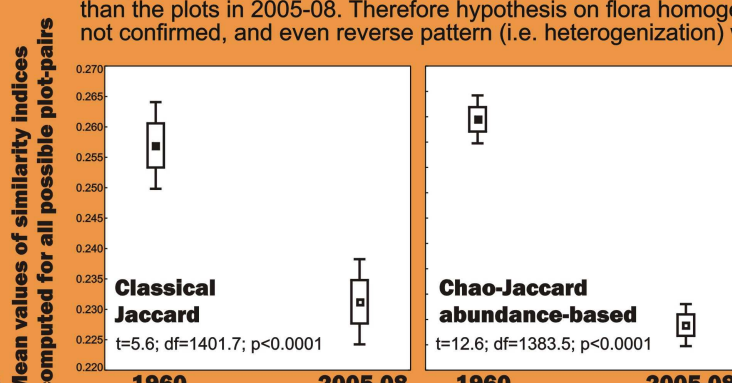


3.3. Diversity and richness



3.4. Flora homogenization?

Mean values of the two similarity indices computed for all possible sampling plot-pairs for the two periods revealed that the plots in 1960 were more similar than the plots in 2005-08. Therefore hypothesis on flora homogenization was not confirmed, and even reverse pattern (i.e. heterogenization) was observed.



4. What next?

4.1. Further research and monitoring

Detailed research including soil chemistry and landscape history are being conducted. For the preliminary results please see: Barańska K, Zmihorski M 2008. Pol J Ecol 56:343-350

4.2. Active protection

Naturalists Club conducts large projects aimed at active protection of the grasslands, including sheep grazing and land purchasing. The project, started in 2010 and is supported by LIFE + and NFOŚiGW



For more details visit our web site:
www.murawy-life.kp.org.pl



abstracts & offprints