

## „Verification concepts of the presence of main forest-forming tree species ranges in Poland” – scientific seminar in Forest Research Institute

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On 8 November 2012, at the Forest Research Institute (FRI) in Poland, there was held a Cyclic Scientific Seminar on a research project „Verification of existing ranges of the main forest-forming trees species in Poland based on new scientific approach”. The scientists from the FRI and other Polish research centers has been involved in the project managed by J. Łukaszewicz (FRI).

During the seminar there were presented the following papers:

- Variability of climate in Poland in the past (H. Lorenc, Institute of Meteorology and Water Management, Warsaw),
- Paleobotany as the source of knowledge on spatial and temporal variability of the ranges of the main forest-forming tree species in Poland (K. Tobolski, Adam Mickiewicz University, Poznań),
- Genetic variation analysis of DNA – a new criterion for verification of the ranges of the main forest-forming tree species in Poland (J. Nowakowska, FRI, Sękocin Stary),
- Impact of selected concepts of criteria to specify ranges of occurrence of the tree species of forest ecosystems in Poland (J. Łukaszewicz, FRI, Sękocin Stary).

The first important question asked by the moderator of the seminar (J. Łukaszewicz,) concerned “person behind” commonly accepted “natural” borders of forest tree ranges in Poland: is this the man or nature? One should bear in mind that the maps of tree ranges in Po-

land are based on works carried out by Szafer during the years 1919–1972. These were almost uncritically based on research conducted by Raciborski in 1912. Palynological studies, the results of which were not accurate enough, thus insufficient to develop geographical atlases. These atlases have not been revised by other authors, because of the authority of Szafer’s science. Even in later editions (Szafer and Pawłowski 1972) no revisions were taken into account (Zaręba 1994).

Research conducted in the ongoing project: Verification of existing ranges of occurrence of main forest-forming species of trees in Poland, was based on silviculture field observations, palaeobotanical studies, climate variability analyses, historical forest inventory data, genetics and environmental studies.

During the seminar, the main point of discussions on tree species ranges regarded the term “natural range”



Photo A. Sawicki

of species distribution, which is difficult to determine. This term could be understood as real distribution or else potential or optimal range of the growth. The determination of linear rigid boundaries of tree ranges is also provided by prohibition of planting of some tree species which are not typical of a given area, which is reflected in Poland's regulations on seed regionalization. The local and regional scale for the occurrence of various tree species and the limits of their ranges was determined as well as distorting effects such fires, floods, hurricanes, gradations of insects, damage caused by game and human management.

## REFERENCES

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