

## NEW ADVENTURES IN THE “LAND OF FIRE” AND THEIR RELEVANCE TO ARCHAEOBOTANICAL AND ENVIRONMENTAL RECONSTRUCTIONS OF THE DOKSY REGION, CZECH REPUBLIC

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The Doksy study region of more than 150 km<sup>2</sup> is characterised by the presence of a large area of sandstone pseudokarst, a shallow basin with peat bogs, and isolated volcanic elevations. Recently the landscape has been predominantly a timbered land. *Pinus sylvestris* is characteristically dominant on the sandstone pseudokarst, and on basalt elevations *Fagus sylvatica* shows highest abundance.

The study area has always been sparsely populated and agriculture has not been the main human activity. Mesolithic, Neolithic, Eneolithic, Bronze Age, Hallstatt and La Tène settlement sites have been found in the region, but with regard to the natural conditions, archaeological research has usually been restricted to rock shelter sites. The development of human impact in the region was connected with the activity of King Karel IV in the 14<sup>th</sup> century. Other important settlement activity was during the 16<sup>th</sup> century with glass-blowing and charcoal making.

Pollen analysis has not registered any human activity from the presence of primary and secondary human indicators up to the 17<sup>th</sup> century.

The pedoanthracological (soil charcoal) research was carried out in 2008 and 2009 and twelve pedological profiles were studied. Within all profiles a large amount of charcoal was found. The charcoal from the profile base is dated to the Mesolithic, Bronze Age, Hallstatt, Early Medieval, High Medieval and Modern period. In all layers of the studied profiles, a dominance of *Pinus sylvestris* and a sparse abundance of *Quercus* sp., *Corylus avellana*, *Betula* sp. and *Sorbus* sp. were recorded.

While we have a reliable conception of Holocene development of the vegetation in the landscape scale in general, the Holocene history of vegetation at the local scale is still indistinct. The main problem is connected with options for pollen analyses. These kinds of analyses often show mainly local pollen assemblages with a mixture of regional pollen rain. In addition, the pollen analysis profiles come from places with wetland vegetation with a different vegetation history from that of terrestrial habitats. We consider pedoanthracological analysis to be a significant indicator of human activity and vegetation history at a local scale in the sandstone pseudokarst here.

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