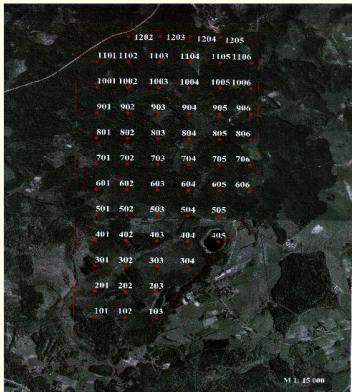


# Diversity of forests in strict nature reserves in Lithuania



Sample plot network in Žemaitija National park Plakštinė strict reserve zone

## Research on Natural and Semi-natural forest ecosystems

Research program on strict reserve stands in national parks is assigned to natural, semi-natural and naturally developing forests in order to observe and evaluate processes of forest ecosystem development. This program was initiated in 1996 with the aim to monitor and collect information on strict reserve forests in national parks for scientific and economic purposes. Networks of 425 sample plots are designed and established in four national parks (Žemaitijos NP - 101, Dzūkijos NP - 118, Aukštaitijos NP - 109 and Kuršių Nerijos NP - 97) strict reserve zones covering 2800ha.

One sample plot comprises to a 500m<sup>2</sup> area. The distance between sample plots is 250m. A number of different stand and vegetation parameters is measured and evaluated in all sample plots. These measurements consist of age, site type, forest type, structure, height, tree diameter, regeneration, shrub layering and ground vegetation densities and species composition.

**Object of the study** - Forests of strict nature reserves. Strict nature reserve status ensures that the forest is developing in a natural way without any direct human intervention towards late successional stages and also towards natural structure of spatial, age and species diversity. Ideal case when such territory is established in naturally formed and untouched forest. However, some analysis shows that the network of strict nature reserves was created not considering the principle of representativity but assessing different values of certain proposed territories.

**Methods:** An analysis of forest inventory data on typological diversity and age structures emphasizing protection gaps and disproportion of protected forest types and unequal distribution of age classes among strictly protected forests. Also the level of naturalness and factors affecting naturalness of these forests is analysed.



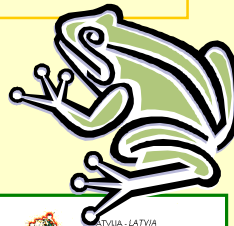
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## Inventory of Woodland Key Habitats (WKH) in Lithuania

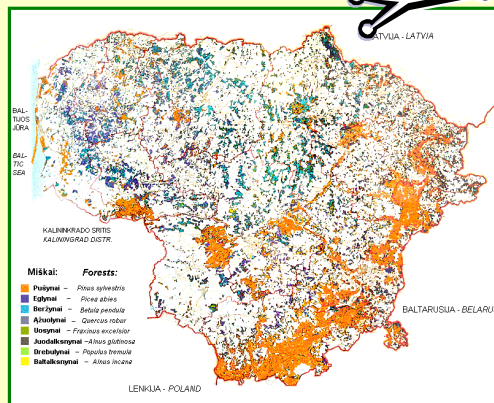
Project started in 2001 and will end in 2005.

A Woodland Key Habitat is an intact forest area with high probability of a present non-accidental occurrence of an endangered, vulnerable, rare or care demanding habitat specialist species.

Woodland Key Habitats are distinguished from other habitats by their valuable features, for example very old trees, a lot of coarse woody debris or a certain forest history. WKH's are generally assessed by a method using Biological and Landscape Key Elements and indicator species.



## Forests in Lithuania



## Protected areas map

