Prilog 4.1

on the south and Finland and Karelia on the north (15 000 km²). Check-list include 1186 wild vascular plants (817 aboriginal species) from 114 families and 114 genera. The own field investigations in 1994-2004, work in Herbariums (LE, LECB, WIR, H, HSI, KUO, TUR) exposed the changes of plant diversity for 160-year period with beginning at first herbarium collections. The work include characteristic of nature condition and vegetation, systematic structure, geographical, ecological-biological (life forms, dispersal, phytocoenological structure) aboriginal flora, classification of the adventive elements, post-glacial development and characteristic of the threatened plants of the flora, floristic division into districts, maps of distribution for 467 species.

P2437. The Effect of Elevation, Slope and Geographic Aspect on Plants Biodiversity in Caspian Beech Forets

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Biodiversity covers the number, variety, and arrangement of living organisms. It is typically described, quantified, managed, and used for various living organisms groups. Biodiversity is affecting by environmental factors such as elevation, slope and aspect. Sixty permanent sample plots with an area of 1000 m2 and per plot including 5 micro plots with 9m2 surface were selected in two types of *Fagetum* and *Fageto-Carpinetum* in Nowshahr research forest in the north of Iran. The woody plants biodiversity were considered in every sample plots by the use of current indices and the regeneration were inventoried in micro plots. The results show negative and significant correlation between biodiversity indices and elevation that it maybe related to temperature decrease with elevation. There is a significant and positive relation between beech regeneration and elevation. The slope effect was not significant on regeneration and woody plants biodiversity but the aspects effect was different in various indices. The total results show the effect of elevation is more than aspect and the effect of aspect is more than slope on biodiversity and regeneration in beech forest.

P2438. The Study of Natural Regeneration of Woody Species after 15 years in Alder Plantation Site in Mazandaran Forests

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In the lower forests of wood and paper industry forest in Mazandaran province four sites of 15 years old of Alder plantation as well as one site of witness forest was selected for the study of regeneration of woody species in planted site after 15 years. In each site three plots 20x20m were selected. The number of woody plants was counted, diameter and height of generated species was measured in each plot. Species diversity was examined by using of Shanon-Wiener function index as well as evenness and richness by using Simpson and Menhinic indexes.
The results of study show that 8 tree and shrub species observed in planted sites. The amount of diversity index in one planted site was higher while in other three sites was lower than natural forests. The evenness also in one planted site was higher than natural forest while in three other sites it was lower than natural forest. The species richness in tow planted sites was higher than natural forest.

P2439. The Nature Reserve Park „Heidenreichstein" in Lower Austria: An example for conservation, management and economic significance of a regenerating peat bog

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The Northern Waldviertel in Lower Austria contained many peat bogs by reason of a suboceanic climate combined with Granite or Gneiss as bedrock. Most of the bogs were either turned into farm land or cut over for fuel production. Only very few sites remained and one of them, the "Heidenreichsteiner Moor", was protected in the 1970s and became a nature park. The land owners, a forest co-operative, built a pathway for visitors with information boards about values and functions of the mire and the surrounding forest. A wooden platform and a watch over were constructed to enable people to see the beauty of the site either from the ground or from above. In a nearby museum, people can get additional information about peat land ecology, conservation issues and threats.
Taking this as an example, we present in a scientific film the ecosystem functions together with possibilities of mire management and protection and strategies to make a nature park of this kind economically successful and accessible for people. We show the measures of nature park managers to maintain the integrity of the habitat and to improve its infrastructure as a recreation area and a place to learn more about nature.

P2440. Pasture flora on family farms in Istria (Croatia)

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Autochthonous vascular pasture flora was researched at the locality of family owned farms which breed sheep, in Istria, Croatia. On Istrian agricultural farms, a total of 328 plant taxa (species, subspecies and varieties) were found. The taxa belonged to 200 genera and 47 families. Part most of them were *Compositae* (16.5%), followed by *Gramineae* (14.6%), *Leguminosae* (10.9%) and *Labiatae* (9.5%). It should be noted that pasture flora in Istria supports numerous species that are rare or endangered, for example those from the *Orchidaceae* family, in addition to species of the genus *Narcissus*, *Crocus*, *Helleborus*, *Dianthus* etc.
These results as preliminary investigation into the pasture flora may play as a guide for the management of pastures and pasture vegetation on family farms in Istria, which contributes not only to the full utilization of th e pasture, thus advancing livestock production, but also to the plant preservation of pastures.

P2441. The Rangelands of Iran

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Rangelands are sometimes defined as unimproved grasslands, shrublands, savannas, deserts, and tundra. They occupy 51% of the earth's land surface and contain about 36% of the total living and dead plant carbon. Small changes in extreme temperatures and precipitation have disproportionately large effects in these regions because of the vulnerability to water availability and water balance The rangelands of Iran comprise all of that area which is grazed extensively by livestock according to the tradition of common law and the peoples ancestral rights. this includes mountains, foot- hills and plains hacking natural vegetation of herbs, grasses, fords, and bushes. Iran comprises od 165 million hectares of which about 90 mil, ha.(54.5%) is rangelands. the reaming 75 mil. ha comprise 23.8 mil.ha. of agriculture land, 12.2 mil. ha. of wood land, 35.3 mil, ha. od Desert & degraded lands, 307 mil. ha. of inland water bodies; urban & rural areas and others. The rangelands of Iran are classified three classes according to vegetation cover.

P2442. Steppes in Towns - Naturalistic planting design in open urban space

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During the past decades the scientific approach to planting design was determined by the use of plants in accordance with typical habitat sites.
Habitat interrelated to garden sites means to consider a wide range of components such as local aspects and requirements of single species or individual development and influence of plant communities in suitably defined habitats. Contemporary understanding of nature and the tendency to conserve and manage it brings us to a new understanding of gardens. Naturalistic gardening has begun be accepted as an aesthetic value in open urban space.
Due to the location in the Pannonic climatic zone, Vienna's townscape is predestined for naturalistic planting design - in accordance with the surrounding native herbaceous vegetation as Steppe Sites and Xerotherm Vegetation and with the need of low maintenance ecological planting design in open urban space. In the year 2000 the group for Plant Use and Planting Design (BOKU) started a project in cooperation with the local authority (MA 42), with the aim to establish Pannonic Plants in a public