667. ESSAYS OF REINTRODUCTION OF A VERY ENDANGERED SPECIES: VERONICA CHAMAEPITHYOIDES LAM. (PLANTAGINACEAE), AN ENDEMIC PLANT OF THE IBERIAN PENINSULA

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Veronica chamaepithyoides Lam. (Scrophulariaceae) is a small annual weed, which only two alive populations that were found in the last seventy years. There are also some old data obtained from herbaria, all of them comming from localities of the center of Spain (mainly Madrid). But in spite of repetitive searches, it seems to be extincted in almost all of them. In order to help this species to survive we have carried out some studies about its germination hability (very sensitive to climatic conditions), and its seeds production. At the meantime we have tried to spread some seeds in potential habitats that were chosen with the help of modelling programs. The first results allow us to be a little optimistic due to the good response of this plant to in vitro techniques.

668. GAP DYNAMICAL RESEARCH IN THE KOSZEGI-FORRÁS FOREST RESERVE (HUNGARY)

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The Mánfa 82C - which is found in the core area of the Koszegi-forrás Forest Reservation - has great nature conservational importance. The area is the most spectacular sample of Helleboro odori-Fagetum: it is active in forest dynamics, 159 years old; the last cutting was in 1973. The main goal of this study was to explore the structure and the pattern of tree stand and understorey vegetation. Along a 300 meter long transect we examined the tree stand structure in systematic points, according to horizontal point sampling and collected physiognomical and coenological data of the understorey vegetation with 2x2 meter quadrats. We found the most expressed gap dynamics in the case of gap-complexes which were formed in a snowbreak in 1995-96. Here we recognized canopy expansion and gap-filling-in too. In the boarder zones of the gaps, the coverage of the fresh forest type indicated herbaceous species generally increase, however here the gap's species also relevant competitors. Despite the browsing pressure of the games, the forest was able to regenerate itself with an adequate force and quality to sign that the reproductional and self-regenerational ability of the forest is excellent.

669. STRUCTURE OF BEE (HYMENOPTERA: APOIDEA) ASSEMBLAGES IN EXTENSIVELY AND INTENSIVELY GRAZED GRASSLANDS IN HUNGARY

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Bees are the most specialised pollinators in Europe, and they have a very special and important function in ecosystems. We studied bee assemblages of the three most widespread grassland types in Hungary. There were 7 pairs of extensively and intensively grazed sampling areas at each grassland type. The bees were collected by individual netting and sweep netting. We captured 483 individuals of 124 species in total. This shows a very divers and species rich bee assemblages in these pasture areas. Both the diversity and the percentage of the rare species were highest on the alkaline meadows area. The dominance of Apis mellifera was very low at each sites compared with similar surveys in grazed grasslands of Switzerland and Netherlands. Neither species nor individual numbers differed between extensively and intensively grazed pastures, among regions, and between edge and interior of pastures. However, both species richness and abundance of bees positively correlated with species richness and cover of flowering plants, indicating the important role of food sources. From the landscape parameters the marshes and the built-up areas seems to have effect on bees.

670. ECOLOGICAL FACTORS AFFECTING THE DISTRIBUTION OF THE CRYPTIC BAT SPECIES PIPISTRELLUS PYGMAEUS AND PIPISTRELLUS PIPISTRELLUS IN SWITZERLAND

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Only in 1997 the Common Pipistrelle (Pipistrellus pipistrellus), a widely distributed bat, has been recognised as two cryptic species. Since then, the new Soprano Pipistrelle (Pipistrellus pygmaeus) was detected in many European countries. In order to clarify its abundance and distribution in Switzerland and the ecological differences between the two species, twenty road transects all over Switzerland were run twice in 2002. We recorded ultrasound bat calls and determined the species based on the spectrograms (N = 981 call sequences). Ecological parameters were compared at the habitat level by GIS-distribution models using the Ecological Niche Factor Analysis ENFA. It could be shown that the newly discovered Soprano Pipistrelle is rare compared to the Common Pipistrelle: on transects, it was observed 33 times less frequently. Additionally its distribution was patchily and limited to areas near water bodies below 800 m altitude. Up to now, P. pipistrellus sensu lato was ranked "not endangered" in Switzerland due to its wide distribution and abundance. The rareness of the newly discovered species and its restricted distribution significantly changes the classification for this cryptic species. We therefore recommend a reassessment of their conservation status.

671. DISTRIBUTION OF COMMON SPADEFOOT TOAD (PELOBATES FUSCUS) AND SOIL TYPES IN HUNGARY

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The Common Spadefoot Toad (Pelobates fuscus) occurs in areas with loose or sandy soils of Eastern and Central Europe. In Hungary it is found in lowlands as well as hilly and montane regions. Its European distribution is well shown in the 50×50 km resolution UTM grid map (Atlas of Amphibians and Reptiles in Europe), however, according to this map it is absent from a considerable part of Hungary. Based on data from publications, collections and researchers we compiled the 10×10 km UTM grid map of the Common Spadefoot Toad's distribution in Hungary. The 800 pieces of data covered 312 UTM grids which is 29,6 percent of all UTM grids in the country's area. Most of the data (~80%) come from research after 1970, so the map is up to date. The distribution of occurrences, irrespectively of the size of the covered area, suggests that the species occurs in all parts of Hungary. The distribution pattern obtained was compared using a GIS analysis with soil types identified in the various UTM grids. Within the distribution range of the species, sandy (34%), a loam (37%) and loamy clay (14%) physical soil types were found to be dominant.