523. CONSERVATION MEASURES FOR FALCO ELEONORAE* IN GREECE (LIFE2003NAT/GR/000091)

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The 4 year LIFE Nature project aims to co-ordinate and implement high priority actions for Falco eleonorae, proposed in the species E.U. Action Plan, for the effective, long-term conservation of the species in Greece. About 90% of its global population breeds within the EU and >75% in Greece. With more than 3/4 of its world population occurring in the Greek archipelago, Eleonoras falcon is by far, the most important bird species hosted in the country. Hellenic Ornithological Society (BirdLife-Greece), in collaboration with the Natural History Museum of Crete, the Royal Society for the Protection of Birds and the Greek Ministry of Rural Development, promotes the implementation of species conservation actions in 9 of the species most significant Greek SPAs. Important project actions include the implementation of the first complete global population census, the implementation of an effective monitoring scheme for Eleonoras falcon, the establishment of a clearing-house mechanism for the species, to co-ordinate conservation, research and monitoring actions, the assessment of primary causes of mortality (e.g. agrochemical pollution in the foraging grounds), the enhancement of breeding habitat quality and species breeding performance through pilot management measures such as rat eradication in uninhabited islets, and the implementation of public awareness campaigns.

524. MACROMYCETES FROM ECCF PROJECT REGISTERED IN MONTENEGRO

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Project of ECCF, leading by Peter Otto, for Mapping and monitoring of threaten fungi in Europe (50 threatened fungal species, including all 33 species candidates for listing in Appendix 1 of the Bern Convention) was realized, also, in Montenegro. From the List of the ECCF Project, in Montenegro was registered 11 species (Phylloporus pelletieri (Lév.) Quél., Strobilomyces strobilaceus (Scop.: Fr.) Berk., Hygrophorus marzuolus (Fr.: Fr.) Bres., Amanita caesarea (Scop.: Fr.) Pers., Gomphus clavatus (Pers.: Fr.) Gray, Hymenochaete cruenta (Pers.: Fr.) Donk, Hydnellum suaveolens (Scop.: Fr.) P. Karst., Pisolithus arhizus (Scop.: Pers.) S. Rauschert, Bovista paludosa Lév., Sarcosphaera coronaria (Jacq.) Boud., Helvella atra Holmskj.: Fr.) from wich three species (Bovista paludosa Lév., Gomphus clavatus (Pers.: Fr.) Gray, Sarcosphaera coronaria (Jacq.) Boud.) are candidates for listing in Appendix 1 of the Bern Convention. The paper deals with the data of distribution of these species in the territory of Montenegro with UTM distribution maps. The species are also proposed for the protection in the national level.

525. DIVERSITY PATTERNS OF ORTHOPTERA, LEPIDOPTERA AND SMALL TERRESTRIAL BIRDS IN TZOUMERKA MOUNTAINOUS AREA, GREECE

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A biodiversity assessment and conservation project is launched for the mountainous area of Tzoumerka in North-western Greece, focusing on the distribution patterns of 12 different biological groups. Preliminary data are presented for three of them – Orthoptera, Lepidoptera and small terrestrial birds. We sampled 11 different habitat types, including fir forests, black pine forests, oak forests, scrubs, stony grasslands, subalpine grasslands and pastures, as well as agricultural land. Preliminary sampling involved time-constraint visits for the invertebrate groups and point counts of 10 minutes duration for birds. A total of 64 Orthoptera species, 38 butterfly species and 70 bird species were recorded in these different land types, during the year 2005. Community composition differed according to land-use type for all the three taxonomic groups studied. For Orthoptera and Lepidoptera the richest-in-species sites included the subalpine pastures and grasslands. These habitats were also important for the conservation of small terrestrial birds, because very were not very species-rich but they included 10 species of conservation concern. However, the most species-rich habitat for birds was the traditionally cultivated agricultural land at low altitude, hosting 11 species of conservation concern. Diversity patterns congruence and conservation issues are discussed.

526. PREDICTING BIODIVERSITY OF DYNAMIC URBAN BROWNFIELDS: A LANDSCAPE MODEL APPROACH

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Urban brownfields provide habitats for rare and endangered species. Due to abandonment, succession, and destruction by redevelopment these habitats underlie dynamic changes. We developed a landscape model to analyse the effects of spatiotemporal configuration of abandoned industrial sites on plants and phytophagous insects in Bremen, Germany. Main goal is to identify settings which support high biodiversity on the landscape scale while accepting local extinction. Plot-based habitat models quantify the relationship between abiotic soil parameters, disturbance regime, successional age, landscape context (the surrounding vegetation structure), and the occurrence of species. The extension of these models to the landscape scale allows the investigation of spatially explicit scenarios. Thus, the effects of different spatial configurations (e.g. scattered versus clustered brownfield sites in an industrially used matrix) and time schedules for redevelopment on both single species and overall biodiversity can be compared. The results reveal that site age is a strong predictor in both plant and insect habitat models and furthermore a driving factor for vegetation structure. Additionally, regional species composition is determined by the spatiotemporal dynamic of the landscape. This spatially explicit information should enable urban planning to maintain biodiversity of industrial areas.

527. IMPACT OF LARGESCALE DAM CONSTRUCTION ON MOVEMENT CORRIDORS OF LARGE MAMMALS IN ARTVIN, NORTHEASTERN TURKEY

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The Turkish Lesser Caucasus harbors many endemic or threatened species. We have investigated the impact of a series of dams planned on River Coruh on the potential movement corridors for wild goat, lynx and golden jackal. By processing digital layers of elevation, slope, streams, population density, vegetation cover and settlement pattern using fuzzy suitability functions, we produced habitat suitability models with GIS for each species. Protected areas and dams were integrated to the models while developing friction surfaces. Using minimum cost pathways, we identified corridors that connect source populations for each umbrella species at the landscape level. These corridors were than analyzed for distance, cost and suitability composition. Comparisons before and after dam construction revealed an increase in the cost of optimum paths for all three species (up to 4619.0%), although in some cases they were of shorter length. Habitat suitability along optimum paths generally decreased (4.58% on average). For lynx and wild goat, the proposed dams severely increase corridor cost