

DOES SOIL MATTER? HELPING BIODIVERSITY MANAGEMENT IN A SOLAR PARK

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There has been a serious increase in solar energy installations in Hungary recently. The majority (98.6%) of the installations were done as green field investment. Due to the nature of technical intervention in the agricultural landscapes, some of the results of these investments was the disturbance of the environment (soil and water), change of landscape (and its values), and reduction in biodiversity of these areas. Due to the increase of land use and land cover change, especially towards soil sealing or reduced availability, it should be important to maintain or improve the role of such places as habitats, besides producing the equally important renewable energy forms. Solar parks on former greenfield areas cover a significant amount of soil surface, and there are tremendous works related to soil resources, their soils are changed during the investment and thus soil properties influence their biodiversity management plan. An important step in habitat development is revegetation. During planting valuable plants for improvement of the biodiversity, it is also important to adapt the plans to the environmental of the solar parks, and also, to its technical parameters. In the recent study soil samplings were done close to the disturbed area and on a nearby natural area. Soil properties were measured by a Near Infrared device. Soil organic matter and N-content resulted differences besides others. The deviation of soil properties proved the importance of soil investigation in this case as revegetation requires knowledge on soil to find the proper plant species for the soils on-site.