

FABRICATED SOIL RECIPES FORMING LANDSCAPE REHABILITATION¹

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Abstract. Recipes for Fabricated Soil were used for the rehabilitation of mining landscapes at the Jennings Environmental Education Center located in Butler County, Pennsylvania. The balance of carbon and nitrogen ions in this soil was 5 to 1. The Fabricated Soil was composed of waste components (low income technology) such as sawdust and wood chips as carbon sources, compost residues as nitrogen sources, and pond sediments. The Fabricated Soil permits growth and propagation of grasses and woody plants. Various experiments and testing of the fabricated soil have been ongoing for 5 years. Micro-biota and mineral composition of this soil were monitored during this time. The rehabilitated landscape was initially planted with willow and poplar trees among which chestnut and oak trees have been recently planted. It has been observed, that seedlings of hardwood trees were healthier when planted in Fabricated Soil which have roots of willow and poplar. Experiments with Fabricated Soil are ongoing using river sediments as water retaining substrate.

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