

Environmental consequences of the rural abandonment: A pilot survey in a Hungarian ghost village

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This study aims to detect the environmental changes subsequent to village abandonment in a hilly region of Hungary with an investigation of vegetation. The examined village has been deserted over a 40-year period; so it is observable how the vegetation, mainly trees and shrubs reclaim the former human-used parcels. The impacts of the rural abandonment on the environment are discussed, there are scenarios which emphasise the negative effects of these processes, whilst others characterise it as a possibility to restore the natural conditions of a given area (rewilding, reforestation). In our survey 14 sites (ruined buildings with their surrounding gardens) were selected where detailed botanical survey was carried out in 2018. Our major questions: Which species of backyard gardens survived abandonment? Which native species are the major colonisers? At what extent invasive alien species contribute to the revegetation process? In each site woody vegetation was recorded in three categories: a) cultivated fruit, b) ornamental and c) wild growing trees and shrubs. The vegetation succession in our case differs remarkably from the general pathways of secondary succession observed in abandoned agricultural fields or other disturbed areas. Common walnut, sweet cherry and pear were the most successful survivors among fruit trees. Spontaneous reforestation did not happen following abandonment, but a long term survival of certain cultivated fruit trees were striking, but the long term survival of certain cultivated fruit trees were accompanied by the immigration of wild growing berry shrubs of the neighbouring woodlands.

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