
THE DAMS OF HISTORICAL PONDS IN TERMS OF SHAPE AND STABILITY

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Keywords: fishpond – dam shape – dam stability – Kostelecko

The article presents the results of the evaluation of the fishpond dams shape in the region of Kostelec and Kouřim in the Central Bohemian Region. The shape of the dams was assessed on the basis of a detailed digital terrain model derived from the data of Digital Relief Model of 5th Generation. The assessment was carried out for a total of 30 dams in the study area. The results of the analyses show that many fishpond dams have steep slopes with steepness higher than recommended for homogeneous dams by the current standard ČSN 75 2410. Stability assessment was then performed for the selected dam of the fishpond Podbečvářský using the SSAP model. The results of stability assessment show that the dam does not have the stability factor required by the standard ČSN 75 2410, although this does not mean that it would be acutely endangered. The presented procedure represents a possible way to approach the safety assessment of the dams of small water reservoirs in larger areas in order to identify the potential hazards associated with reduced stability of these earth bodies.