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COEXISTENCE OF ECOLOGICAL QUALITY AND LANDSCAPE PREFERENCE IN URBAN GREEN SPACES

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Abstract

Creating the environment with both high ecological quality and beautiful scenery is the primary goal of urban green space design and management. However, existing literature mainly deals with ecological quality and landscape preference separately. Their integration has not been investigated. To fill this gap this study employed the concept of coexistence to combine the two aspects into a single factor, in which the method of reference condition was used to measure ecological quality of 20 sites of urban green spaces, and the preference scores of these sites were judged by 545 respondents. In addition, 15 landscape characteristics that describe the main features of 20 sites were picked out and quantified to explore their effects on the coexistence of ecological quality and landscape preference. The results revealed that (1) there was a significantly positive correlation between ecological quality and landscape preference; and (2) the cover structure of vegetation and the perceived naturalness of water were two positive predictors of coexistence, while the percentage of land covered by water and color contrast were negative predictors. In practice, planting mixed vegetation of trees, shrubs and grass, keeping a small ratio of natural water coverage, and a weak color contrast in the landscape can effectively improve the coexistence.

Key words: coexistence, ecological quality, landscape preference, multi-functioned design

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