[Lake ecosystem services and their ecological valuation--a case study of Baoan Lake in Hubei province].

Abstract

Along with the maturation of estimation methods for biological resources, the studies on the services value of ecosystem become a hotspot in ecology. The studies on the services value of lake ecosystem were not been reported before this issue, and this issue firstly attempted to estimate the Baoan Lake ecosystem services and its indirect economic values on the basis of ecological function analysis and some economic methods. The results showed that the indirect economic value (in RMB) of organic matter production, CO2 fixation, O2 release, nutrient recycling, water conservancy and water supply and SO2 degradation were $1.51 \times 10^7$, $4.77 \times 10^7$, $3.63 \times 10^7$, $4.45 \times 10^5$, $1.10 \times 10^8$, $5.15 \times 10^5$ yuan.yr-1, respectively. The sum was about $2.24 \times 10^8$ yuan.yr-1. From the above incomplete estimation, it was known that the Baoan Lake ecosystem has great ecological and economic values.

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