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研究报告

黑龙江省森林植被碳储量及其动态变化

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摘要

黑龙江省的森林资源在全国森林资源中占有较为重要的位置.利用我国第一次(1973～1976年)至第六次(1999～2003年)森林资源清查资料，以及不同树种生物量和蓄积量之间的线性关系，对黑龙江省近30年来森林碳储量进行了求和推算.结果表明,黑龙江省6次森林资源清查中森林的总碳储量分别是7.916×10^8 t、5.413×10^8 t、5.661×10^8 t、5.880×10^8 t、6.216×10^8 t和6.011×10^8 t,总体呈先下降后上升的趋势,说明30年间黑龙江省的森林是CO^2的“汇”;特别是1977～1981年后，黑龙江省森林碳储量呈逐渐上升趋势，说明近20年来黑龙江省森林CO^2“汇”的作用在增强.如果对现有森林进行更好地抚育和管理，黑龙江省森林作为CO^2“汇”的潜力很大.

关键词 森林植被；碳储量；黑龙江省

分类号

Carbon storage and its dynamics of forest vegetations in Heilongjiang Province

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Abstract

Forest is the leading sink of carbon on the earth,while the forest resources of Heilongjiang Province take an important position in China.Based on the national forest inventory data from 1973 to 2003,the carbon storage of forests in Heilongjiang Province was estimated by the linear relationship between stand biomass and volume.The results showed that the total carbon storage of forests in 1973～1976,1977～1981,1985～1988,1989～1993,1994～1998 and 1999～2003 was 7.916×10^8,5.413×10^8,5.661×10^8, 5.880×10^8,6.216×10^8 and 6.011×10^8 t,respectively,with an increasing trend since 1977,indicating that the forests in this Province played a role as a sink of atmospheric carbon dioxide,and this functioning was strengthened during the last 20 years.If the current forest is managed well,it would become a huge potential carbon sink in the future.

Key words Forest vegetation Carbon storage Heilongjiang Province

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