



华东师范大学学报(自然科学版) » 2011, Vol. 2011 » Issue (6): 100-107 DOI:

生命科学

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中华竹鼠(*Rnizomys sinensis*)春季洞穴生境选择初步研究

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Den habitat selection of China bamboo-rat (*Rnizomys sinensis*) in spring

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摘要 2009年1~4月,在广西元宝山自然保护区对中华竹鼠洞穴生境选择进行了研究。野外共测量了85个10 m×10 m样方13个生态因子,其中利用样方54个,未利用样方31个。运用频次分析和Mann-Whitney U检验表明:郁闭度、人为干扰距离、避风性、灌木密度、灌木距离、食物因子和海拔对中华竹鼠洞穴生境选择存在显著影响($P<0.05$) ;距水源距离、坡向、坡位、乔木密度、乔木距离和坡度没有影响($P>0.05$)。中华竹鼠选择利用郁闭度良好,避风性良好,食物因子良好,坡度为20~40°的斜坡,坡向为东坡或南坡,坡位为中坡位或上坡位,海拔大于1 800 m,乔木密度小于30株,乔木距离为2~5 m,灌木密度为1 000~5 000株,灌木距离为小于0.1 m,水源距离大于500 m,人为干扰距离大于1 000 m的生境。主成分分析结果表明,前5个主成分的累积贡献率达到62.779%,影响春季洞穴生境选择的主要因子为隐蔽性因子,次要因子是水源因子、地理性因子、人为干扰因子和食物因子。

关键词: 中华竹鼠 洞穴生境选择 元宝山自然保护区

Abstract: Den habitat selection of the China bamboo-rat (*R. sinensis*) was investigated from January to April in 2009 in Yuanbaoshan Nature Reserve, Guangxi. Thirteen ecological factors were recorded in 10 m×10 m plots of 85 samples, including 54 used samples and 31 unused samples. The data were analyzed by frequency analysis and Mann-Whitney U test. The results showed that the difference among the canopy density, the distance to human disturbance, the shelter of wind, the shrub density, the distance to shrubs, the elevation and the food abundance were significant ($P<0.05$); while the difference among the water distance, the slope, the aspect, the slope position, the tree density and the tree distance were not significant ($P>0.05$). The habitat selection shared the following ecological factors: the well canopy density, the well shelter of wind, the well food richness, the slope among 20 to 40 degrees, the aspect toward east or south, the slope position with uphill or middle place, the elevation more than 1 800 m, the tree density less than 30 ind./plot, the distance to tree about 2 to 5 m, the shrub density about 1 000 to 5 000 m, the distance to shrubs less than 0.1 m, far away to water(more than 500 m) and the human disturbance distance more than 1 000 m. Principle component analysis indicated that the shelter, the water, the geography, the human disturbance and the food abundance affected the habitat character of the China bamboo-rat in spring.

Key words:

收稿日期: 2010-11-01; 出版日期: 2011-05-01

引用本文:

. 中华竹鼠(*Rnizomys sinensis*)春季洞穴生境选择初步研究[J]. 华东师范大学学报(自然科学版), 2011, 2011(6): 100-107.

. Den habitat selection of China bamboo-rat (*Rnizomys sinensis*) in spring[J]. Journal of East China Normal University(Natural Sc, 2011, 2011(6): 100-107.

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