

南方草食动物生产预测模型 ——以湖南道县为例

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摘要:为促使中国南方拥有合理的载畜量和保证其生态系统的良性循环,以湖南道县为南方养殖典型区示例,系统分析南方饲草资源的种类,及其总量计算的方法,探讨南方草食动物发展的潜力,并在此基础上建立草畜平衡的预测模型,并以道县为例对模型进行了验证,同时介绍了该模型的组成和使用情况及其不足。养殖户只需输入一些基本信息,该模型就会以图示方式直观地指导用户进行畜牧生产活动。同时,通过该模型的预测,可以了解南方畜牧业的发展潜力,使畜牧区拥有合理的载畜量,从而使草畜之间达到相对动态平衡。该预测模型的建立对南方畜牧业的发展有着重要的指导意义。

关键词:中国南方;饲草资源;草食动物;动态平衡;预测模型

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Prediction Model of Herbivores Production in Southern China ——Dao County As a Typical Feeding Area

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Abstract: In order to determine a reasonable number of livestock for ensuring necessary ecosystems in southern China (Dao County as a typical feeding area), several forage resources and calculation methods were systematically analyzed. Using the potential development of herbivores, a forecast model for balance between forage resources and herbivores was established. This model was verified effectively by Dao County and its composition, application and insufficiency were introduced. The model can predict and advise users how to arrange livestock production efficiently after applying local data. The potential development of herbivores in south China can be forecasted and a reasonable number of livestock can be ascertained for feeding areas through the forecast model to determine relative dynamic equilibrium between forage resource and herbivore amount. This forecast model has practical value for guiding animal husbandry development in south China.

Key words: South China; Forage resources; Herbivores; Dynamic equilibrium; Forecast model

推动畜牧业的现代化和可持续发展是我国经济发展、社会进步和人民生活水平提高的必然要求^[1], 是农业增效、农民增收、加快农业现代化进程的重要途径^[2,3]。随着北方风沙的日益严重而不断禁牧,南

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