The value of forests and afforestation for recreation in Ireland

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Abstract

Forest policy in Ireland is increasingly adopting an ecosystem services approach. This requires accounting for the complex relationship between forests and the diverse outputs they supply. Valuation in monetary terms has been employed for some time in research and policy development to account for the benefit of these services and their interaction with the economy. Irish forest policy includes a goal of expanding forest cover to 17% and this significant expansion of the forest estate and change in land use has the potential to increase the value of forest ecosystem services greatly. Forest recreation is a well recognised service that has been a primary focus of previous valuation research. This study uses data from a household survey of the public to develop a demand model for forest recreation in Ireland. A number of count models are compared and the value of a single forest visit is calculated based on travel costs. The annual value of forest recreation in Ireland is derived from this figure. The results suggest that previous estimates of annual forest visitation and the value of recreation have been conservative and that forest recreation provides a considerable benefit to the Irish population. To extend the results a second model is derived with the goal of developing a national spatial demand model for forest recreation. This model is combined with a simulation model of the Irish population to identify hotspots of recreational demand. In addition, current forest recreational resources are identified and mapped nationally based on combining available spatial data. Employing these data, the degree to which annual forest visitation might be increased through the expansion of the forest estate can be estimated and valued.