Greenspace and Biodiversity

Michael Brennan

Introduction

Defining what one means by "green space" can be difficult. A city contains a range of green spaces, from managed parks and sports pitches to fragments of semi-natural areas. For the purposes of this work green space is all vegetated areas within or adjacent to the urban fabric within Dublin, such as public parks, sports pitches, golf courses, and relic stands of semi-natural vegetation. As well as its human benefits, urban green space can provide habitats for wildlife allowing people to encounter nature virtually on their doorstep, and the importance of urban green space has been increasingly recognised by both policy makers (Green City Guidelines, Natura, 2008, Guidelines on Sustainable Residential Development in Urban Areas, DOEHLG, 2008) and ecologists. Although Dublin city and the surrounding regions have undergone unprecedented economic growth in the past decade, one can still find 28 of the 33 species of Irish land mammals within 20km of O'Connell Bridge (Hayden & Clarke, 2002).

Dublin Greenspace Change

Between 1990 and 2006 the area of urban green space within the four Dublin counties increased from 7,140 hectares to 9,270 hectares (an increase of 29.8%). However the total area of the built fabric increased at a higher rate and the result was a marginal decline in the share of green space in the urban fabric from slightly above 24% in 1990 to 23.6% in 2006

Figure 3.1 shows absolute green space within Dublin counties. Figure 3.2 indicates percentage of green space within the Dublin counties compared to the entire city area. Absolute amounts are measured in kilohectares (kha).
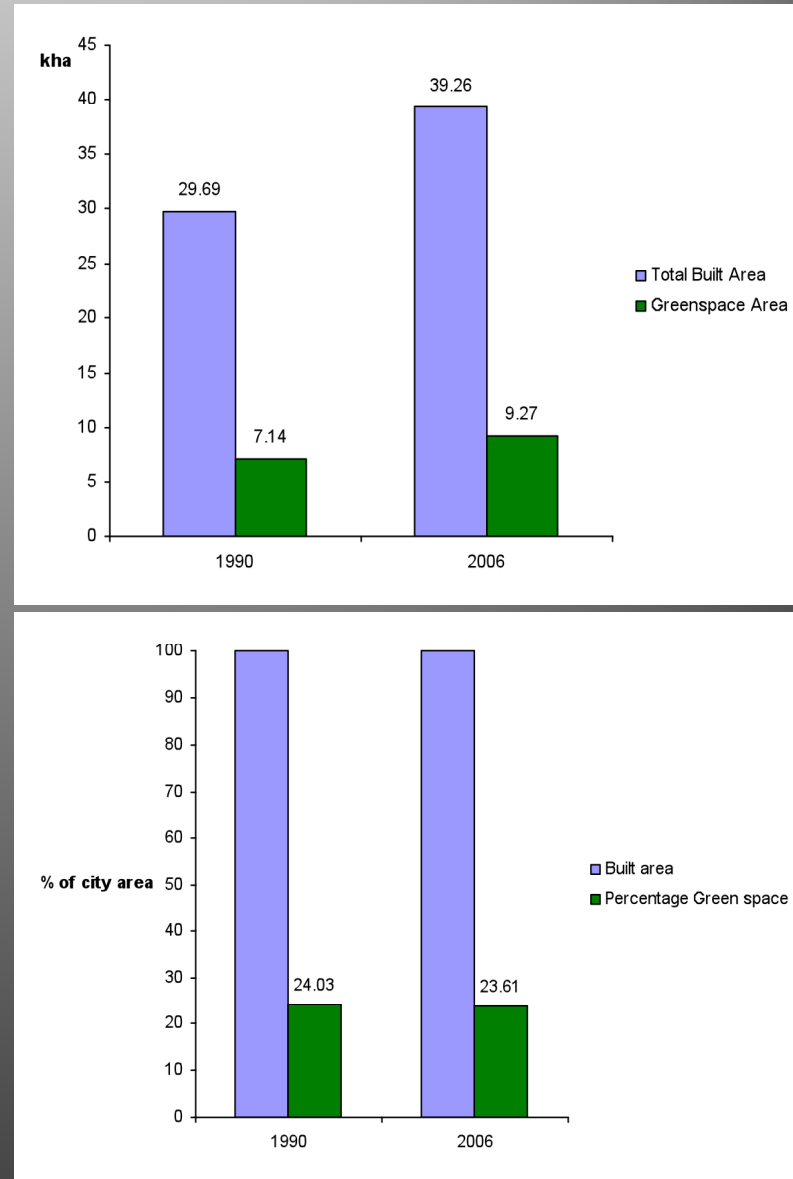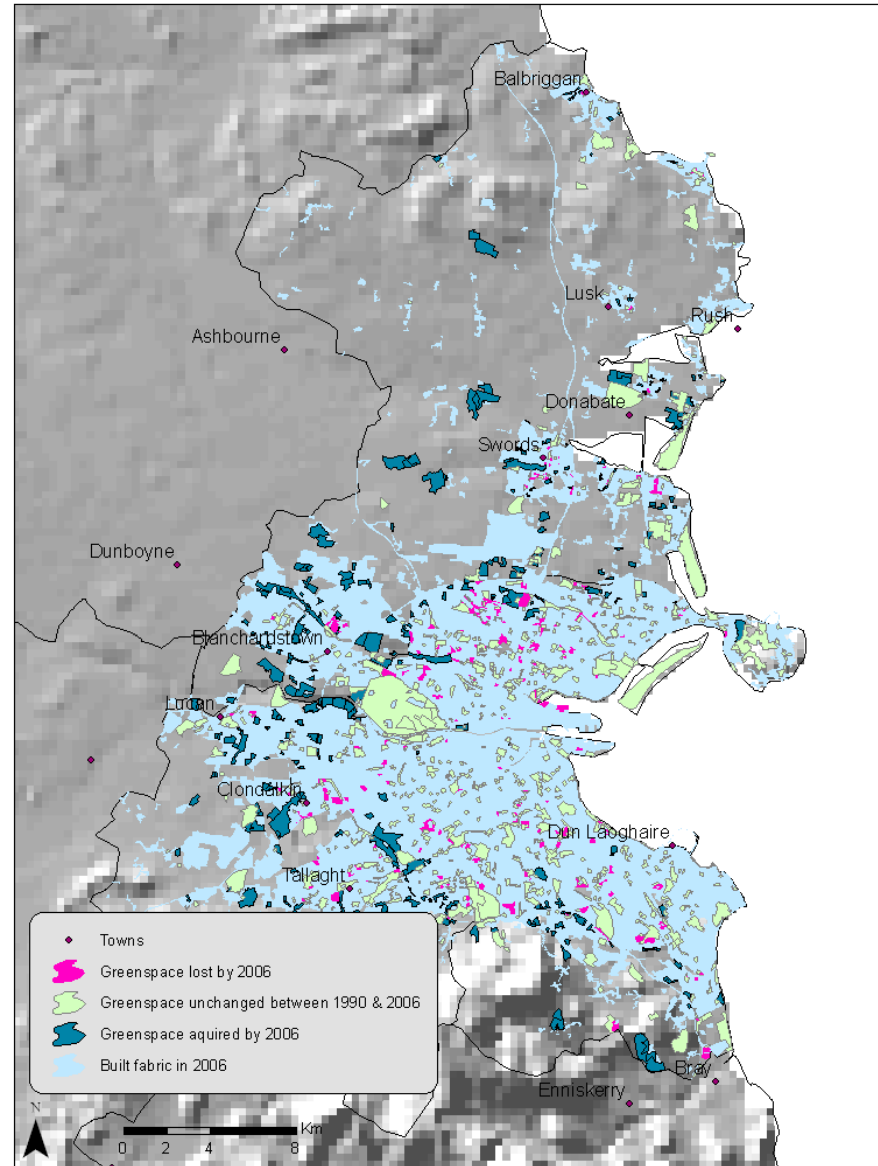

Figure 3.1 (top) and 3.2 (bottom)

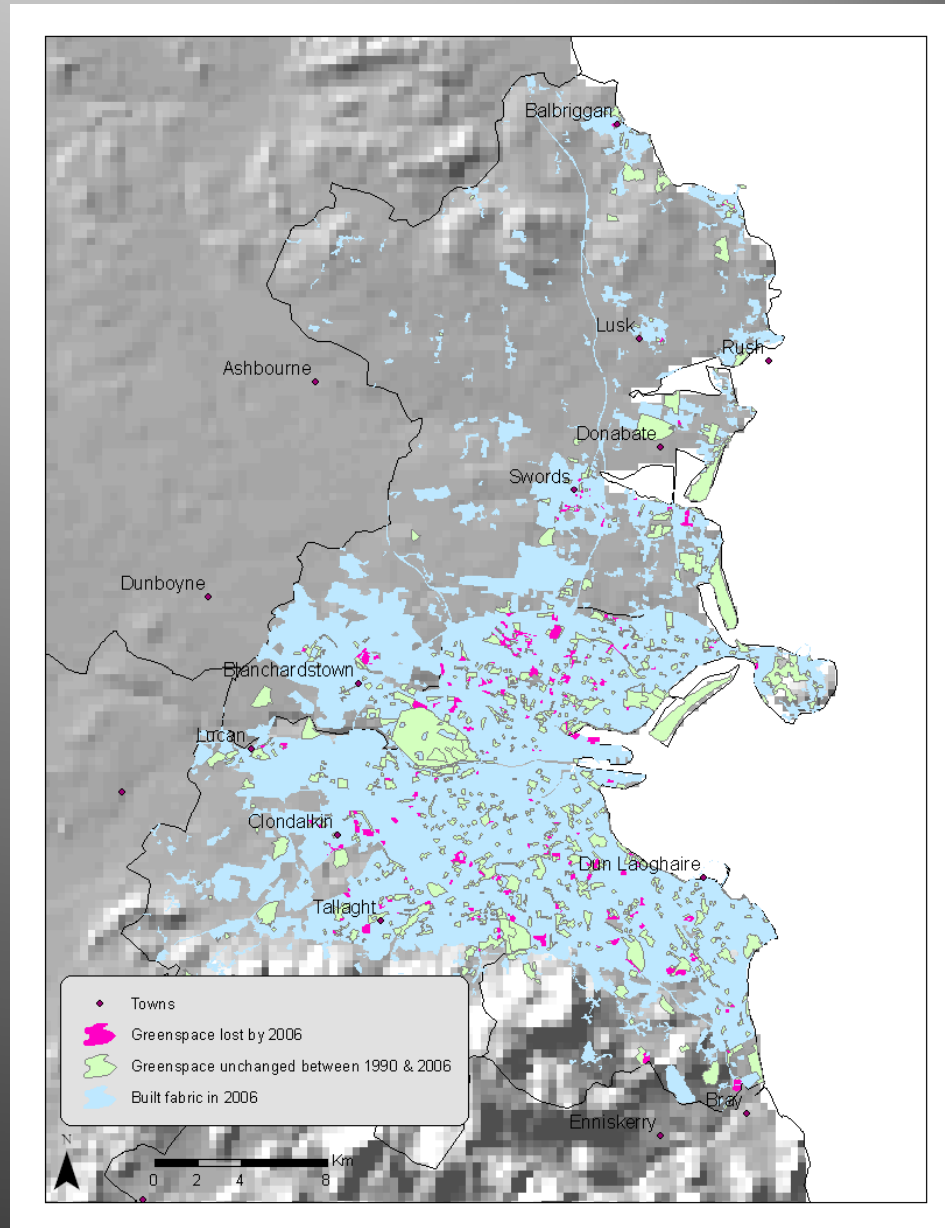## Spatial Differences between Greenspace Losses and Gains

The changes in the Dublin's urban green space have not been uniform. Some green spaces within the city have been lost, while areas that were formerly farmland or semi-natural areas have been enveloped by the expanding city and become new urban green spaces. Since 1990 the city has acquired new areas of green space while loosing older areas to development.

Map 3.1 The geography of greenspace gain and loss
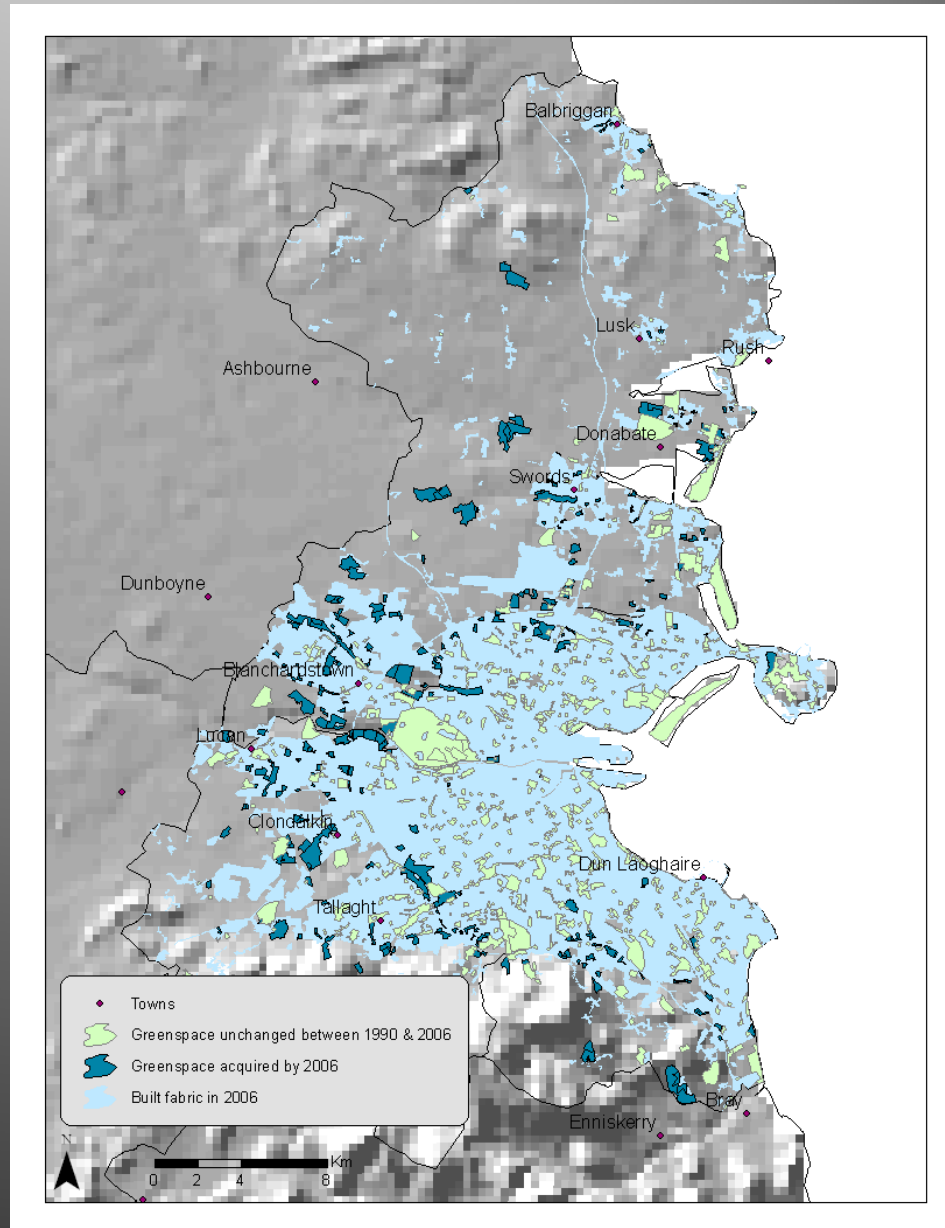
Greenspace Gained in Dublin between 1990 and 2006

Map 3.2 shows the 222 areas of urban green space lost in Dublin city between 1990 and 2006. Notable areas of loss include Finglas, Santry, Stillorgan and Stepaside. Of the areas lost, 55% were converted to low/medium density residential areas with the rest becoming industrial, commercial and infrastructural land.

Map 3. 2 Loss of Greenspace: 1990 - 2006

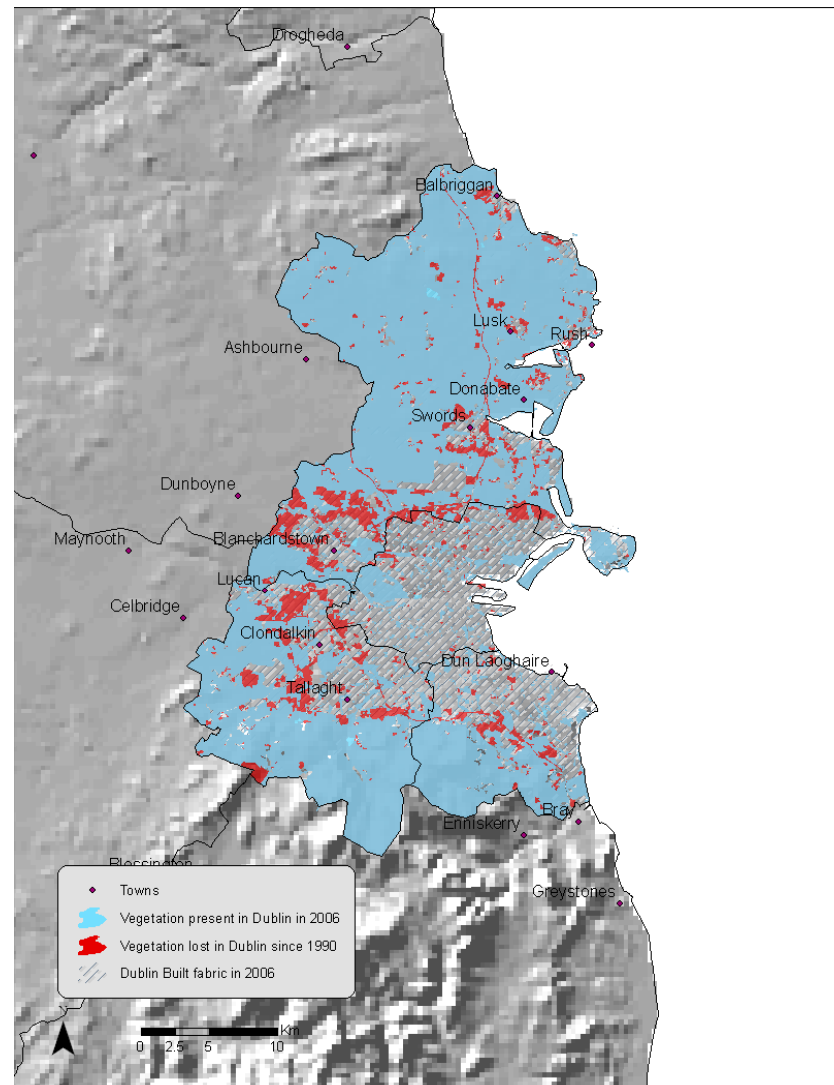## Greenspace Lost in Dublin between 1990 and 2006

As can be seen in Maps 3.1 - 3.4, there has been significant variation in the patterns of loss and gain of green space. Most of the new green space is located in the city periphery while the majority of the lost green space occurred nearer the city centre. For species within the city, the net result is habitat loss and isolation of the remaining populations from one another.

Map 3.3 Gain in Greenspace: 1990-2006

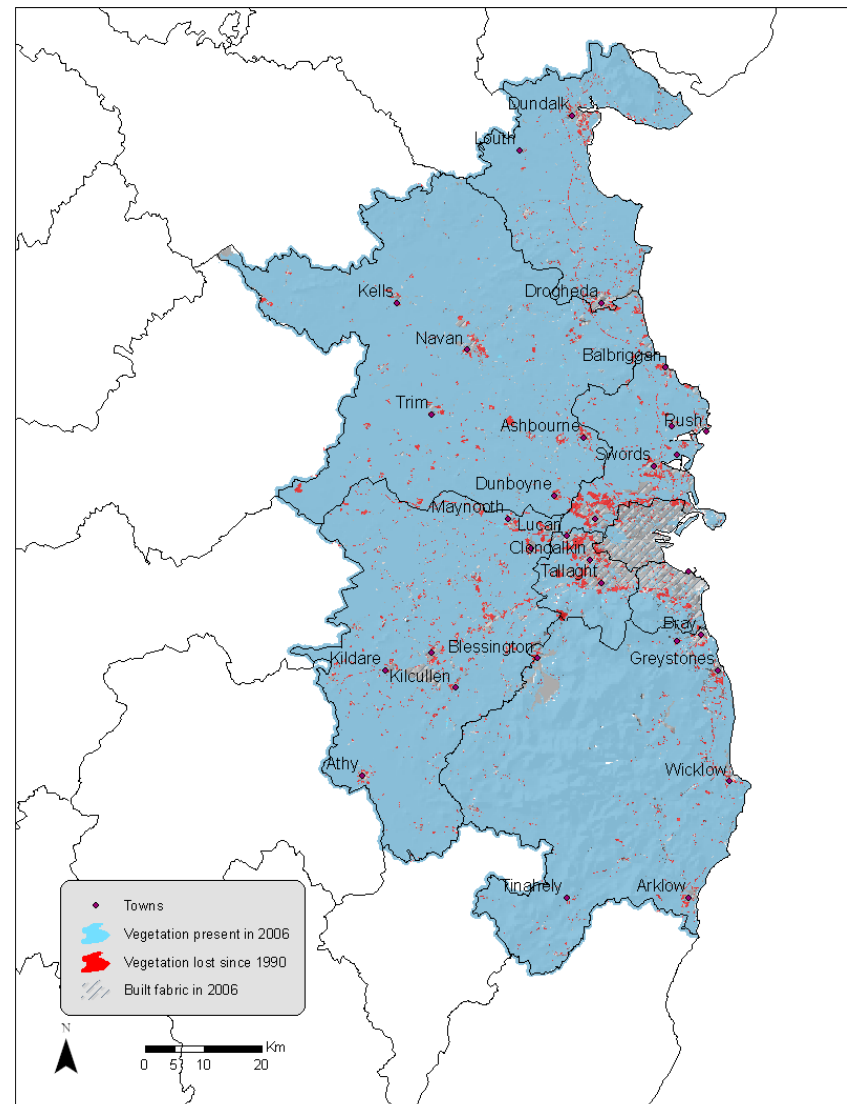## Loss of Vegetation around Dublin City between 1990 and 2006

Although Dublin has gained *urban* green space, this has come at a price. As the city has developed, nearly 8000 ha of vegetation has been replaced by artificial surfaces.

Map 3.4 Loss of vegetation in Dublin Region: 1990-2006

Loss of Vegetation within the UEP Study Region between 1990 and 2006

This map clearly shows the loss of vegetation from the Greater Dublin Region in the recent past. Almost 21,700ha of vegetation has been replaced by artificial surfaces, about a third of this within Dublin. This emphasises that development has not been evenly spread across the region.

Map 3.5 Loss of Vegetation in the UEP study region: 1990-2006