



Urban food cultivation in the United Kingdom: Quantifying loss of allotment land and identifying potential for restoration

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Highlights

- Allotment land area in Britain has declined by two-thirds since its peak.
- A quarter of former sites have the potential for reconversion to use as allotments.
- The most deprived urban areas have experienced eight times the level of allotment land loss than the least deprived areas.
- The history of site closures provides insights to help meet present day demand.

Abstract

Urban agriculture contributes to food security and human wellbeing and is associated with a wide range of environmental benefits. In the United Kingdom, a substantial proportion of urban agriculture occurs in allotment gardens, and these

are a historically significant part of the landscape. However, allotment land provision has declined significantly since its mid-twentieth century peak. Here, we examine the magnitude and nature of this decline using a GIS analysis of historic Ordnance Survey maps covering ten British urban areas from the beginning of the twentieth century to the present. We find there has been a 65% decline in allotment land from its peak to 2016, a pattern also reflected in per capita provision, which declined by 62%, demonstrating a long-term trend across the case study areas, and the loss of food provisioning land for an average of 6% of the urban population. We also show that the most at-risk areas for food insecurity have faced eight times the level of allotment closures than the least deprived areas. Assessing subsequent land-use of former allotments, we show that 47% of allotment land is now part of the urban built infrastructure, and 25% is other forms of urban greenspace. Restoration of these greenspace sites to allotments has the potential to meet up to 100% of the current levels of demand for new allotments by residents of our case study areas. Our results demonstrate that whilst a significant amount of urban agricultural land has been lost, opportunities for restoration exist on a substantial scale.