

## **HS1: Gardens**

### **Definition**

For the purposes of this statement, gardens are defined as the private open space surrounding residential dwellings, with the householder having sole responsibility for management. This statement does not include communal open space surrounding residential dwellings, as this is usually managed by an outside agency – a contractor employed by a local authority or private landlord for example.

### **London's Garden Resource**

An analysis of aerial photographs of Greater London undertaken by the London Ecology Unit in 1992 suggests that the gardens of private dwellings comprise about 20% (31,600 ha.) of the city's surface area.

A similar analysis undertaken by the Waltham Forest Biodiversity Partnership suggested that 7.3% of that borough's land surface comprised 'gardens (with some value for wildlife)'. Only gardens that appeared to contain tree cover were included in this analysis. The total garden resource of the borough is therefore greatly underestimated.

Naturally, not all gardens will be of equal importance in terms of nature conservation value. The majority of gardens in areas of high-density housing are small plots with very little diversity (or opportunities to promote diversity) in vegetation structure. At the other end of the spectrum are the gardens of houses in some of the more exclusive parts of suburban London. These contain small pockets of woodland, ponds and other features which might well be managed as nature reserves in their own right if they were in the public domain. However, most gardens, particularly in suburban London, probably consist of the archetypal lawn with flowerbeds and borders, often with a fringe of semi-mature trees or hedgerow shrubs at the boundaries.

### **Nature Conservation Importance**

In nature conservation terms the value of gardens has not been properly recognised, beyond their importance as a feeding station for garden birds and thereby, as a very personal point of contact with the natural world. The wider value of gardens has not been appreciated mainly due to the perception that this resource is composed largely of exotic plants under a management regime primarily dictated by human needs.

However, a range of species has become synonymous with gardens, particularly in urban areas. The most obvious are the 'garden' birds including blackbird, song thrush, robin, blue tit and house sparrow. These can occur in all but the smallest of gardens if suitable habitat and/or an artificial food supply is present. Similarly, several butterflies are considered to be 'common or garden species'; the holly blue may be present in gardens containing its food plant (holly trees) and peacock visits gardens with an abundant supply of nectar-producing plants.

Garden biodiversity is dramatically increased where a number of larger gardens adjoin each other, where features such as mature trees have been maintained within gardens or where ponds have been created. Larger gardens with mature trees can support a wide range of woodland or woodland edge species, including greater spotted woodpecker, stag beetle, hedgehog, noctule bat and speckled wood butterfly. Where there are ponds, common frog and both southern and brown hawker dragonflies may be present.

There is little doubting the value of gardens in conserving many of these species in London. Research by the London Ecology Unit suggested that bird numbers and diversity decrease as residential density (i.e. reduction in garden size) increases. Ongoing surveys of stag beetles in London co-ordinated by the London Wildlife Trust (LWT) for the People's Trust for Endangered Species (PTES) have elicited numerous records of this beetle from private gardens. Garden ponds are now thought to be an important refuge for common frogs and the suburban parts of London may support higher densities of common frogs than surrounding rural areas.

## **Threats and Opportunities**

### **Threats**

The most important threat to the biodiversity of gardens is a lack of appreciation of its importance in the conservation of London's wildlife. Although a great many members of the public manage their gardens with wildlife in mind, most probably do so for aesthetic reasons rather than as a concerted effort to conserve biodiversity. The vast majority of householders with gardens probably have very little awareness of the role of gardens in biodiversity conservation. This lack of awareness results in unwitting damage to the wildlife interest of gardens. Cutting hedgerows and shrubs during the bird breeding season, removing leaf-litter, dead wood and other organic detritus which harbours a variety of invertebrates and over-tidying can reduce wildlife value. Replacing soft surfaces with hard surfaces, by creating off-street car-parking in front gardens for example, has resulted in a major loss of vegetation in some areas.

Although numerous gardeners do manage, maintain, or create wildlife-friendly gardens, many of these wildlife oases are temporary in nature. Features attractive to wildlife such as ponds, bird tables and 'wild' areas may be removed or modified as houses change hands. This may be especially true in those parts of the city where a significant portion of the population is transient.

Reduction in garden size resulting from backland development and infilling also significantly reduces the biodiversity interest of gardens. Backland development and infilling invariably results in the reduction of mature tree cover, overgrown shrubberies and old lawns, thus dramatically reducing the structural diversity provided by older, larger gardens.

The use of chemical pesticides in gardens may also pose a threat to non-target species. It has been suggested that the decline in the national population of song thrushes, for example, may be partly linked to the use of molluscicides on farmland and in gardens.

### **Opportunities**

Gardening is still one of the most popular recreational activities and in London and other large conurbations in particular, the private garden is often a cherished space where it is possible to retreat from the hustle and bustle of city life. In this sense at least, the garden provides a point of direct contact with the natural environment.

Forms of gardening that express the aspirations and character of the gardener are becoming increasingly popular. Gardeners are 'designing' their outdoor space in much the same way as interior space is designed to fulfil personal tastes and preferences. One such gardening trend is the desire to make the garden wildlife-friendly, particularly by people who want to actively express environmental concern. Gardening for wildlife can be linked to other environmental issues such as reduction in water use, planting trees and shrubs as filters of noise and air pollution, and growing organic produce.

Gardens form a vast and intricate network of green corridors which can facilitate the movement of certain species between adjacent areas of open space and which can support populations of common woodland edge species. By identifying where mature garden habitats might provide such links, areas of open space with little existing nature conservation interest can be targeted for enhancement.

### **Data Sources**

Dawson D. & Gittings T. (1990). *The effect of suburban residential density on birds*. LEU.

Dawson, D. & Worrell, A. (1992). *The amount of each kind of ground cover in Greater London*. LEU.

Langton, T. (1991). *Distribution and status of reptiles and amphibians in the London area*. LNHS.

Waltham Forest Biodiversity Partnership (1999). *Land use data for Waltham Forest*.