their genes and their communities and interactions. The term first came to public notice following the Earth Summit in Rio de Janeiro in 1992. One of the outputs of the Summit was the Convention on Biological Diversity – a commitment to conserving and improving global biodiversity signed up to by many countries, including the United Kingdom.

One more thing was necessary to open the way for biodiversity to play its rightful role in improving towns and cities. This was the acknowledgement that wildlife and its habitats are just as important in towns and cities as in rural and remote areas. Although there are still people who think that nature can only thrive in the countryside, and that somehow the wildlife of towns and cities is second rate, or a poor imitation of 'proper' wildlife, there is increasing recognition of the part that properly functioning ecosystems play in improving both urban environments and people's quality of life. This recognition has grown out of the activities of the vigorous urban nature conservation movement which sprang up in the late 1970s and included, in 1980, the formation of what is now the Wildlife Trust for Birmingham and the Black Country, and the London Wildlife Trust.

Wildlife in towns all over the world has to contend with typical urban characteristics. For example, towns and cities are generally warmer and dryer than the surrounding countryside because increased energy-flows warm buildings and hard surfaces. This 'heat island effect' is linked to the fundamentally arid nature of towns. Rainfall runs over sealed surfaces into drains rather than being gradually absorbed into the ground, as in the countryside. Other common characteristics include the presence of exotic species and 'urban specialists', such as feral pigeons, brown rats and house sparrows, the masking of the soil profile by the remains of previous development, and the unique assemblages of species which occur when cosmopolitan nature expresses itself on 'brownfield sites'.

If the nature conservationists have arrived, bright eyed and bushy-tailed, in our post-modern metropolises, what sort of welcome are they getting from the eclectic mix of urban regeneration professionals or 'urbanists'? Not much of one – judging by government pronouncements about, and activities related to, the urban renaissance. This seems to be almost entirely focused on social and economic developments. There are references to 'the physical environment', a determination to rid towns of eyesores and derelict land, and a desire to improve streets and squares to encourage socialising. Even so, there is no breadth of vision, or depth of understanding, of the relationships which should be recognised and nurtured between people and the natural world.

Since the break up of the Department of the Environment, Transport and the Regions (DETR), responsibility for 'the environment' has been separated from transport, regional development, planning, and local government. These functions are now split between four ministries (the Office of the Deputy Prime Minister, and the Departments of Transport, Trade and Industry, and Environment, Food and Rural Affairs). This has serious repercussions for sustainable development which demands integration and strategic thinking in these areas. At least local authorities still combine the necessary functions and, moreover, have a discretionary power under the Local Government Act 2002 to 'do anything they consider likely to promote the economic,

social or environmental well being of their local area'.

AMONGST THE BUILDINGS

Typically open spaces take up about one-third of urban areas. Whether there by design or default, they may contribute to, or detract from, sustainability. The resources needed to manage them, such as energy, chemicals and finance may – or may not – be compensated for by the economic and social values they provide. The resources will be offset to a greater or lesser extent by the free ecosystem functions provided, especially by informal, semi-natural and natural greenspace. The matrix of open spaces performs many such functions for both people and wildlife with its vegetation, permeability and varying degrees of connectedness and isolation within the town, and between the town and the open countryside. These functions include flood defence, improving air quality, providing shelter and shade, places for recreation and wildlife habitats, and enhancing property values.

One way of classifying greenspaces is shown in Figure 5.1. This simple typology recognizes four landscape types. In two of them natural processes predominate, while in the other two human activities predominate.

Working landscapes are crucially important to sustainable development. The amount of locally grown food, on farms or in private gardens (although these belong in the next class) or public allotments, should be a sustainability indicator. Many people living in deprived urban areas have difficulty obtaining fresh fruit and vegetables. Locally grown produce helps to address this deficiency, as well as making good use of open land, providing recreation and exercise, and saving on transport and fuel. Although reducing in number, there are more farms within towns than is generally realized. Walsall MBC owns several farms close to the town centre, and neighbouring Sandwell runs its own dairy farm, complete with milk quota, less than two miles from West Bromwich town centre.

Areas of urban forestry are increasing thanks to the work of the National Forest in the Midlands, community forests such as the Forest of Mercia, mainly in Staffordshire, and the Red Rose Forest in the North West,

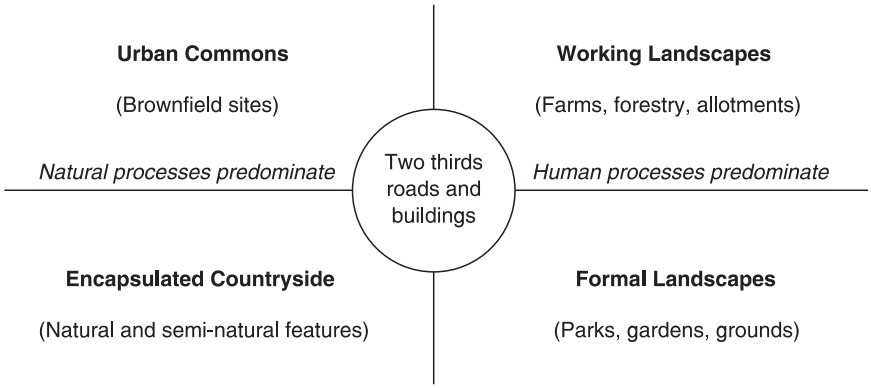

Figure 5.1 Urban landscape types