HA9: Reedbed

Definition

Reedbeds are wetlands dominated by stands of common reed *Phragmites australis*, where the water table is at or above ground level for most of the year. Reedbeds occur at the margins of lakes, pools, rivers or reservoirs in water that is less than 1 metre deep. Due to the dominance of common reed, reedbeds are often botanically poor (although they can support a variety of rare wetland plants) but are very rich in invertebrates. There are a number of bird species that are closely associated with reedbeds.

For the purposes of this audit, reedbeds are identified as stands (or continuous belts) of common reed which exceed 0.5 ha in extent.

London's reedbed resource

Common reed occurs along the edges of lakes, reservoirs and rivers throughout London and is particularly common along the ditches that are all that remain of the once extensive grazing marsh in east London. However, in many of these sites common reed occurs as a narrow fringe or small patches on lakes or rivers which are therefore more appropriately identified as wet marginal vegetation and included within the marshland audit (HA8).

Despite London's wetland heritage, most estuarine habitats (including extensive reedbeds) have been lost as river walls were erected to reclaim the watery wastes and enable further expansion of the city. Most naturally occurring reedbeds are now largely confined to a few sites along the tidal Thames (and its tributaries) in the easternmost boroughs and in areas of old gravel workings and shallow reservoirs. Although there is a scarcity of naturally occurring reedbeds a number of new reedbeds are being created as gravel workings are restored, or redundant reservoirs are developed for nature conservation and recreation.

Reedbeds over 0.5 ha are given in Table 1 below and the extent of this habitat in London is shown in the Map.

Table 1: Reedbeds over 0.5 hectares in extent in Greater London

Borough	Location	Approx. area of reedbed (ha)	Total (ha)
Barking & Dagenham	Chase Nature Reserve Goresbrook Dagenham Breach Roding (north of Barking)	0.5 1.0 0.5 0.5	2.5
Bexley	Crayford Creek Thames Crossness Thamesmead/Crossness	1.0 0.5 3.0 (inc. ditches)	4.5
Brent	Brent Reservoir	1.0	1.0
Greenwich	Tump 53/Thamesmead	1.0 (inc. ditches)	1.0
Havering	Berwick Ponds	3.0	13.5

Borough	Location	Approx. area of reedbed (ha)	Total (ha)
	Ingrebourne Marshes	4.0	
	Rainham Marsh	6.0 (inc. ditches)	
	Thames (east of Fords)	0.5	
Hillingdon	Springwell Lake	2.0	2.0
Hounslow	Bedfont Lakes	1.0	1.0
Newham	Roding Creek	7.5	8.0
	Bow Creek	0.5	
Richmond upon Thames	Pen Ponds	0.5	3.0
	Londsdale Road	0.5	
	Wetland Centre (Barn Elms)	2.0	
Waltham Forest	Walthamstow Marsh	6.0	7.0
	Essex Filter Beds	1.0	
London Total			**43.5**

Nature Conservation Importance

Despite covering only a tiny proportion of London's surface area, reedbeds are of special nature conservation value. By their very nature most reedbeds are uncommon and transient features of the natural landscape. The right conditions for reedbed establishment occur infrequently. Where reedbeds do become established they are prone to succession to willow scrub and wet woodland unless there is some constraining factor. Drainage and development of wetlands have exacerbated the natural scarcity of this habitat.

Some reedbed sites of nature conservation value in Greater London

Goresbrook, LB Barking & Dagenham

Rainham Marsh, LB Havering

Roding Creek, LB Newham

Walthamstow Marsh, LB Waltham Forest

Although reedbeds are naturally scarce, there are many animal species which are wholly dependent upon this habitat. In London these include reed warbler, water rail, and the fen wainscot moth. At least five other species of moth in London are dependent upon reed as a larval foodplant.

London does not support populations of rare birds that are reedbed specialists (i.e. bittern and bearded tit), however, bitterns are regular winter visitors to small reedbeds in the Lea Valley in Essex and Hertfordshire, and bearded tits are regular winter visitors to reedbeds throughout London. Reedbeds are also used as roost sites for a wide variety of birds including migratory

species and raptors such as short-eared owl. The tidal reedbeds in the Thames are particularly valuable as sheltered feeding areas for fish fry.

Threats and Opportunities

Threats

The major threats to reedbeds are drainage and lowering of water tables; lack of, or inappropriate management; and loss to development.

Common reed is a very robust plant and can survive in quite dry conditions once established. However, in dry conditions terrestrial plants soon grow and will eventually dominate. Seasonal (or regular, as in the case of tidal reedbeds) inundation is a necessity to maintain high quality reedbed habitat. Many reedbeds are lost as a result of drainage of nearby areas, resulting in the gradual lowering of the surrounding water table.

Reedbeds along lakes, rivers and ditches frequently undergo succession to scrub and woodland (or are shaded out by bankside trees) unless there are factors which arrest the successional process. Historically in the traditional farmed landscape, reed and invasive willow scrub would have been cut as feed or bedding for livestock; alternatively, livestock would have been allowed to graze the reed as water levels receded during the summer months. The lack of grazing animals in urban London has prevented this traditional form of management from being practiced for many years.

Succession is not usually a problem associated with tidal reedbeds in the Thames, as regular inundation with brackish water usually prevents the establishment of scrub. One of the main threats to tidal reedbeds is dredging of the main river channel nearby, which may result in the erosion of the accumulated silt upon which the reedbed is established.

Loss of reedbed or reed-fringed ditches to built development still occurs, particularly in sites along the tidal Thames and its tributaries in east London. Other small areas of reed are removed to accommodate anglers, who often require swims to be cut through reedbed or clear larger areas of reed to create additional swims.

Opportunities

The scope for the restoration of reedbeds in London is perhaps limited considering the lack of extensive areas of undeveloped riverside or semi-natural lakeside. However, there are considerable opportunities for the creation of reedbeds as part of flood defence and river enhancement schemes and gravel pit restoration. Furthermore, as the amount of dredging required on the Thames declines or is better targeted as a result of fewer movements of large ships, there are possibilities for re-establishing tidal reedbeds on exposed mud-banks at the rivers edge.

Further opportunities arise as a result of the ability of reedbeds to attenuate storm-water run-off and remove certain pollutants. There is a growing interest in incorporating constructed reedbeds into surface water and grey water drainage systems for this purpose. These could result in the creation of relatively large reedbeds, which may provide valuable wildlife habitat. However, there is not yet sufficient evidence to indicate their value in maintaining or enhancing biodiversity. Similarly, there have been projects to establish reedbeds in watercourses and lakes in London’s parks as part of a management regime aimed at reducing the highly eutrophic condition of many of these urban wetlands.

Data sources

London Wildlife Habitat Survey (1984/5). Held by LEU, includes habitat dot distribution maps, aggregated area figures and standardised information on every survey parcel.

Rationale & Limitations

Reedbed sites were identified from the London Wildlife Habitat Survey (1984/5) and data on the size of each reedbed were provided by site managers or other local authority staff. As the habitat is scarce, it is unlikely that any reedbeds over 0.5ha were missed.

However, stands of continuous reed less than 0.5 ha in size are not included in the audit. These areas may nevertheless represent an important resource, particularly as most reedbed sites cover less than 1 ha. The relatively transient nature of the habitat and the threat o f succession along narrow strips of reedbed also serves to highlight the importance of continuing re-surveys and appropriate management measures being taken to conserve remaining areas.