

WETLAND

“When a duck suddenly emerges from a pond covered with duck-weed, I have twice seen these little plants adhering to its back...I suspended a duck’s feet... in an aquarium... I found that numbers of the extremely minute ... Just hatched shells crawled on the feet, and clung to them so firmly that when taken out of the water they could not be jarred off”. Charles Darwin.

Wetland habitats in the Borough include mire, ponds, lakes, and rivers. A great variety of plants grow in wetland, ranging from floating plants in open water to marginal plants in marshy areas. The boundaries of wetland are often unclear, but blur into the wider landscape.. Determining factors on the range of species found include water level, flow and quality. Wetland is particularly important for amphibians, invertebrates and birds. Invertebrates are particularly indicative of habitat quality and type.

VISION: Water, essential for life, is too often overlooked; we need to restore appreciation of Bromley’s wetlands, which support important wildlife such as great crested newt, dragonflies and kingfisher.

AIMS:

- To safeguard and enhance existing wetland habitat and increase the area of wetland, including mire.
- To provide links between fragments of wetland habitat and establish buffer zones around wetland.
- To monitor, survey and appraise the extent and ecological quality of wetland and their dependant species.
- To maintain and improve water quality of rivers traditionally supporting good fishery populations

Factors affecting the habitat:

- (a) Widely fluctuating annual rainfall has led to drought conditions in the 1990s and flooding in the 2000s.
- (b) Water abstraction from rivers
- (c) Management of water table and water quality for mire.
- (d) Disturbance and damage of wetland habitat as a result of recreational use.
- (e) Eutrophication and pollution (e.g. sewage contamination, dumping of rubbish).
- (f) The spread of invasive and non-native species, including Crassula, Signal crayfish and Canada Geese.
- (g) Creation of wetland habitats within gardens and on farmland.
- (h) Viruses such as red leg disease of frogs and the Phytophthora disease of alder trees.
- (i) Ecological succession.
- (j) Filling in of ponds.
- (k) Intensive use for ornamental fish and fisheries.
- (l) Increasing range of dragonfly species.

Flagship species

Flora:

Ivy leaved crowfoot, bladder sedge, mares tail, nodding bur marigold, black sedge, curled pondweed, bog asphodel, common cotton grass, 8 bog-moss species..

Fauna:

Great crested newt, kingfisher, reed bunting, reed warbler, water voles, *Goera pilosa* (a caddisfly), *Nemurella picteti* (a stonefly), *Isoperla grammatica* (a stonefly), minor fish species eg. stickleback, minnows, heron. Grass snake, grey wagtail, dragonflies and damselflies, Daubenton's bat, amphibians, sedge warbler, heron, little grebe, great crested grebe, water rail.

Negative indicators

Flora: New Zealand Stonecrop, Japanese Knotweed, Himalayan balsam, curly water-thyme, Canadian pondweed, floating pennywort, parrots-feather.

Fauna: Brown rat, Chinese mitten crab, red-eared terrapin, and Signal crayfish.

Other: Pollution, algal blooms

Retrievables

Fauna: Water vole, water shrew, native crayfish, minor fish species (eg. eel, gudgeon).