

# Water in the Park

*By Michael Davison*

**Our Park's great scene-stealers are its rolling grasslands, its great oaks, its herds of deer. Yet underlying all these is a resource without which no plant life or animal life could exist. The lifeblood of the Park is its water.**

Rainwater seeping underground through layers of gravel, trickling along beds of clay, welling up in springs that feed streams and ponds: it is water, seen and unseen, that creates the landscape we cherish and the flora and fauna it sustains. A single oak tree can suck up 200 gallons of water a day; grass and bracken send their roots down into damp soil that is never far below the surface; deer drink and wallow in the ponds; midges that breed in the bogs feed birds and bats; willows and alders adorn the riverbanks.

The Park's two most visible areas of water are the two Pen Ponds and Beverley Brook. The ponds originated in a trench dug in the early 17th century to drain a boggy area; later in the century this was widened and deepened by the extraction of gravel for local building. The Ponds today take in water from streams flowing from higher ground around them, and release it down an open watercourse to Beverley Brook. Spillways have recently been built at the northern end of both ponds to prevent an exceptional flood breaching the pedestrian causeways.

Beverley Brook has its source in Worcester Park and enters the Park at Robin Hood Gate. Its water, once polluted by outflow from sewage treatment works, is visibly improved nowadays and several species of fish have been seen there – if not the beaver which gave the brook its name in medieval times. The brook has been artificially straightened over the years: there is a plan to introduce artificial 'berms', or half-barriers, to simulate natural meanders, create eddies and encourage a wider range of flora and fauna.

While most streams drain into Beverley Brook, a ridge of higher land across the south-western corner of the Park forms a watershed beyond which one important watercourse drains westward towards the Thames. This rises in a spring above Dann's Pond, then flows down through Ham Dip Pond and Ham Gate Pond to join Sudbrook, on the Park boundary.

Dann's Pond itself is undergoing carefully managed clearance, supported by the wildlife charity Froglife as the home of the great crested newt. Ham Dip Pond and Ham Gate Pond are in urgent need of similar attention. As Park Deputy Manager Adam Curtis explained: 'Over the years the ponds have become clogged with silt from rotting leaves and duck droppings: as a result the water is starved of the oxygen that fish and other water life need for survival'.

The de-silting of ponds of this size is expensive, but the results can be seen from the success of a recent project elsewhere in the Park. Adam's Pond, near Sheen Gate, was suffering from years of neglect at the time Adam Curtis came to the Park seven years ago. Its restoration became one of his first projects, and today's serene waters, graced by wildfowl and ringed by reeds that encourage dragonflies and damselflies, are a conservation triumph.

Another watercourse, this time draining northwards, is a stream that rises north of Sidmouth Wood and meanders through Conduit Wood towards the Park boundary near Bog Gate. Here two veteran black poplars, Britain's rarest native tree, flourish in the boggy soil.

How many ponds are there in Richmond Park? Probably about 30, though the exact total depends on the time of year. Some are permanent features, man-made to drain the land or provide water for livestock; these include Barn Wood Pond, Bishop's Pond, Gallows Pond, Leg of Mutton Pond, Martin's Pond and White Ash Pond. Others are no more than shallow depressions which dry out in summer: these form a wildlife habitat for plants and creatures which, though primarily aquatic, can tolerate dry conditions for part of the year.

Isabella Plantation has its own separate water system developed in the 1950s. Fed by water pumped during the day from the upper Pen Pond, the central brook trickles downhill through Still Pond, Thomson's Pond and Peg's Pond, supporting a huge variety of water-loving plants. From Peg's Pond a conduit takes the water into the Park, where it is absorbed into the ground and eventually percolates back to Pen Pond. The linked ponds and tinkling brook of Isabella show how water can be harnessed mainly to please the eye.

Elsewhere in the Park, human hands have over the years tapped natural springs and built reservoirs for the practical purpose of supplying water to buildings within and outside the Park. Water is at once a main feature of the Park's landscape and one of its most important habitats. Its proper management is as important a responsibility for today's custodians of the Park as any other aspect of its conservation.