## **Location & Access**

**OS**: 142 • **GR**: TF 187 083 • 71.0ha (176.00acres) • Part leasehold, part freehold 1990

Habitat type: Wetland

The reserve is located south of the level crossing in Deeping St James in the B1166. Access is by an unmade road off the B1166, approx 1km south of the level crossing (at the sharp bend near the banks of the River Welland). A car park is provided, located 400m form the reserve entrance along the unmade road. A circular visitors route includes an 'easy access' path to a bird hide.

## **Description & Management**

Wetland south-east of Deeping St James of some 160 acres including part of the Deeping Gravel Pits SSSI and the Welland Bank Pits.

The reserve consists of a number of flooded gravel pits. The main lake (formerly known as "The Lake") was excavated in the late 1800s and has largely developed naturally since then. The two areas of smaller lakes and pools (formerly known as Welland Bank Quarry) were excavated in the 1990s. Being of relatively recent origin they contrast markedly with the older lake.

With generous grants from the Heritage Lottery Fund and English Nature Aggregates Sustainability Fund, the Trust was able to purchase the main Lake in 2003. The Trust has established a long lease on the recently excavated pits and have worked with the gravel companies (principally Lafarge Aggregates) over the past few years to devise a suitable restoration scheme.

The two areas together are now known as the Deeping Lakes Nature Reserve.
The grants awarded by the Heritage

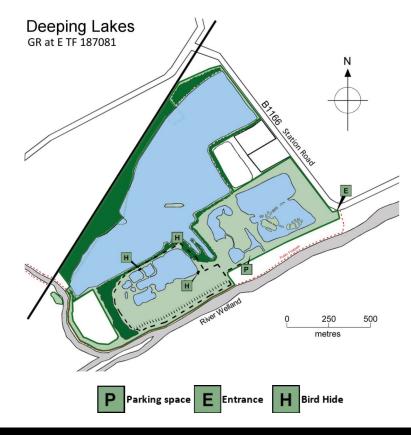
Lottery Fund and Natural England Aggregates Sustainability Fund covered not only the purchase of The Lake but also an 18 month management project to complete a programme of habitat and access improvements.

The Lake is noted for its wildfowl and waterbird communities. Management of this area has been aimed at: path maintenance along the southern shore, creating small wildflower meadows and, clearing trees from an area where early marsh orchids were known to grow. A bird hide overlooks the lake.

Management of the newer lakes has been concentrated on establishing the grassland areas, coppicing or pollarding trees planted as part of the restoration process, and the removal of self-sown trees around the edges of the various lakes. By keeping the margins tree free

it is hoped that marginal vegetation and reedbeds will naturally develop, and there are some encouraging signs of this. Islands are also being kept "tree free" or even totally free of vegetation to encourage ground nesting birds such as terns, plovers and lapwings.

In 2015 the lake between the entrance and car park was redeveloped, levelling off and breaking up 3 old islands which were very elevated out of the lake to create 27 smaller islands which can be flooded in winter to create both breeding islands for terns, gulls and waders as well as feeding scrapes for passing migrants. Since their development, the islands have attracted a whole host of waders and waterfowl. Several viewing screens have been installed along the track to the car park.





## **History**

'The Lake' and the privately owned lake ('The Mere') west of the railway line were both guarried to provide rail ballast for the Great Northern Railway. Quarry work started on the Mere in 1870 and was completed in 1875. Work then started on The Lake and continued for 22 years. Pre-dating the ballast extraction in 1848 a brickworks had been established, working an area near to where the boathouse now stands. Over 2 million bricks were produced, again for the Great Northern Railway. Over 100 men were employed at the gravel pits and brickworks and a temporary settlement was erected which included shops, stables, a blacksmith and a carpenters shop.

The Mere was transformed into a picturesque beauty spot by the owner Mr Richard Thompson of Stamford. He stocked the lake with fish, planted trees on the islands and planted the woodland alongside it. The lake soon became a popular visitor attraction, with shooting and fishing parties from London often staying in the area. There were four large Thames fishing boats brought up from London on the lake.

The 1899 OS map shows The Mere as a fish pond with two boathouses and many tree covered islands. The Lake, by contrast, is shown as tree covered marshy ground, with a network of railway tracks used to extract the gravel. Part of the site is shown as a working pit, some of the land is yet unquarried, and is shown with the original field boundaries. A triangle of railway lines (used to turn trains around) now frames the area where the island can now be seen. The map was somewhat out of date, since quarrying had ceased in 1897. It does however show an interesting snapshot of the working pit.

In the 1950s the Wildfowl (and Wetlands) Trust established a bird ringing trap on the island. Up to 1964 catch data was included with the data from the Borough Fen Decoy. From 1964-1982 a total of 11,574 ducks were ringed on the island. The largest annual total ringed was 1,252 in 1977, these being mostly mallard. A pochard ringed in February 1966 was shot in Mogodon, Russia in September 1968, some 8,400 miles from where it was ringed.

The Lake and The Mere were designated as a SSSI (Site of Special Scientific Interest) in 1968). The SSSI citation says that the pits support a heronry (on The Mere islands) of national importance with the diversity of wintering wildfowl species and the breeding bird community being of regional importance. Heron numbers have fluctuated with a peak of 103 nests being counted in 1990. Cormorants started breeding on The Mere in 1992, and may have contributed to a steady decline in nesting herons. In 2009, 24 heron nests were counted. There is no evidence that nationally heron numbers have declined as a result of the influx of cormorants.

## **Restoration**

In 1966 Joan Gibbons, a well respected botanist, noticed The Lake from a train window as she travelled to London. She tracked down the owner and arranged to take a look at the site. In a letter written in August 1966 she notes:

"[I found] a gravel spit running out into the water and growing with all the watery plants one could wish!"

She went on to list some of the plants she found, including greater spearwort and early marsh orchids.

By the time Lincolnshire Wildlife Trust acquired the site in 2003 the spit had become very overgrown with willow scrub. Orchids and other wildflowers had long gone but it is known that orchid seed can remain viable for many years, so the scrub was removed during the winter of 2003/4. Ground flora responded well to the clearance work. The first marsh orchids appeared in 2007, and most of the plants Joan recorded in 1966 have returned.

There is no public access to the spit, but seed from plants growing on it have now been used to seed other areas of the reserve.

The reserve was entered into the Higher Level Stewardship scheme (HLS) in November 2008. This government funded scheme aims to deliver significant environmental benefits to land in the scheme. It sets targets which the Trust has to meet, but will also fund hedge restoration and fencing projects.

Under HLS, three of the old boundary hedges around The Lake were planted up with native trees/shrubs in 2010. A newly planted hedge near the car park was laid during the winter of 2009/10.

No other restoration of the land around The Lake is planned, but some smaller areas have been coppiced to create structural diversity. Much of the land adjacent to the railway is dominated by moribund elder scrub. A trial plot has been established where elder has been felled, and it is hoped that hawthorn might eventually replace it.

Most of the practical work carried out on the reserve is done by volunteers and work parties, without whom management of the reserve would be impossible. In 2012 volunteers clocked up over 5,000 hours work on the reserve!