

**Site name:** Cotswold Water Park                      **Unitary Authority/County:** Gloucestershire, Oxfordshire, Wiltshire

**District:** Cotswold, West Oxfordshire

**Status:** Site of Special Scientific Interest (SSSI) notified under section 28C of the Wildlife and Countryside Act 1981

**Local Planning Authority:** Cotswold District Council, Gloucestershire County Council, Oxfordshire County Council, West Oxfordshire District Council, Wiltshire Unitary Authority.

**Ordnance Survey 1:50,000 sheet:** 163                      **National Grid reference:** SU029942

**Notification date:** 7 January 2021                      **Area:** 1,919.05 ha

#### Reasons for notification:

The Cotswold Water Park SSSI is of special interest for the following nationally important features:

- breeding great crested grebe *Podiceps cristatus*; little egret *Egretta garzetta* and little ringed plover *Charadrius dubius*;
- a diverse assemblage of breeding birds of lowland open waters, their margins and scrub;
- non-breeding shoveler *Spatula clypeata*; gadwall *Mareca strepera*; pochard *Aythya ferina*; tufted duck *Aythya fuligula*; great crested grebe; coot *Fulica atra*; green sandpiper *Tringa ochropus* and lesser black-backed gull *Larus fuscus*;
- an assemblage of over 20,000 waterbirds during the non-breeding season; and
- populations of the aquatic plants starry stonewort *Nitellopsis obtusa*, lesser bearded stonewort *Chara curta*; pointed stonewort *Nitella mucronata* and clustered stonewort *Tolypella glomerata*.

#### General description:

The Cotswold Water Park consists of 177 current and former gravel workings straddling the borders of Gloucestershire, Wiltshire and Oxfordshire. It is the UK's largest marl (lime-rich) lake system. The gravel deposits were laid down during the last Ice Ages 350,000 and 45,000 years ago. They lie just beneath the surface, at a depth of 0.5-6m, within which can be found the remains of woolly mammoth, rhino, deer and bison. The lakes are mostly in two blocks. A larger grouping to the west is centred on the village of Ashton Keynes. A smaller block extends south and south-east of Fairford. More recently pits have been excavated in the central area, linking the two blocks.

The lakes form an extensive series of shallow and deep open waters which occur in association with a range of marginal habitats including sparsely-vegetated islands, gravel bars and shorelines, reedbed, marsh, wet ditches, rush pasture, semi-natural and improved grasslands, woodland and scattered scrub including a reproductively active population of native black poplar *Populus nigra*. This range of habitats provides valuable nesting, resting and feeding conditions which support nationally important numbers and assemblages of birds in the breeding and non-breeding seasons. Some of the lakes support a roost of gull species in nationally important numbers.

The site is of special interest for its non-breeding populations of eight species: shoveler *Spatula clypeata*; gadwall *Mareca strepera*; pochard *Aythya ferina*; tufted duck *A. fuligula*; great crested grebe *Podiceps cristatus*; coot *Fulica atra*; green sandpiper *Tringa ochropus*; lesser black-backed gull *Larus fuscus* and an assemblage of over 20,000 non-breeding waterbirds. The assemblage comprises a wide variety of waterbirds, including (in addition to the aforementioned species that are reasons for notification in their own right), large numbers of wigeon *Mareca penelope*, mallard *Anas platyrhynchos*, teal *A. crecca*, black-headed gull *Chroicocephalus ridibundus*, common gull *Larus canus* and herring gull *L. argentatus*.

The wet habitats and adjacent scrub support a diverse assemblage of breeding birds of lowland open waters, their margins and scrub. On open shingle, especially where sites are currently being worked, little ringed plovers *Charadrius dubius* breed in nationally important numbers. Shingle bars and islands support colonies of common terns *Sterna hirundo*. The open waters and their margins support great crested grebes, which breed in nationally important numbers, and large numbers of mute swans *Cygnus olor*, greylag geese *Anser anser* and tufted ducks. Heronries within the Cotswold Water Park hold grey herons *Ardea cinerea* and a nationally important population of little egrets *Egretta garzetta*. Gadwall, shelduck *Tadorna tadorna*, little grebe *Tachybaptus ruficollis* and water rail *Rallus aquaticus* are widely distributed. Pochard, garganey *Spatula querquedula* and shoveler breed in small numbers. Large numbers of reed warblers *Acrocephalus scirpaceus*, sedge warblers *A. schoenobaenus*, Cetti's warblers *Cettia cetti* and reed buntings *Emberiza schoeniclus* breed in the reeds and scrub, and cuckoos *Cuculus canorus* are common. Kingfishers *Alcedo atthis* nest in exposed banks. Yellow wagtails *Motacilla flava* nest in small numbers, with others breeding nearby and feeding within the site. Scrub in a mosaic with open grassland supports large populations of breeding garden warbler *Sylvia borin*, long-tailed tit *Aegithalos caudatus* and bullfinch *Pyrrhula pyrrhula* together with smaller numbers of grasshopper warblers *Locustella naevia* lesser whitethroat *S. curruca*, linnet *Linaria cannabina* and yellowhammer *Emberiza citrinella*. There is a strong population of nightingales *Luscinia megarhynchos*.

In recent years several rare wetland bird species have summered in the Cotswold Water Park, with some now breeding. Bittern *Botaurus stellaris* is now established as a breeding species, and great white egret *Ardea alba* bred successfully for the first time in 2020. Other species now regular visitors in summer include cattle egret *Bubulcus ibis*, crane *Grus grus* and marsh harrier *Circus aeruginosus*.

Eleven species of stonewort (charophyte) are present within the lakes of the Cotswold Water Park. One of these starry stonewort *Nitellopsis obtusa* is Vulnerable and Nationally Rare. Three of the remaining species, lesser bearded stonewort *Chara curta*, pointed stonewort *Nitella mucronata* and clustered stonewort *Tolypella glomerata* are Nationally Scarce. Britain and Ireland represent the world stronghold for lesser bearded stonewort and the population within the Cotswold Water Park is the largest in Britain. *Tolypella glomerata* is an early succession species which requires a constant turnover of waterbodies as occurs at the Cotswold Water Park. As a result, the population within the site is one of the strongest in Britain. Although more nutrient-rich lakes are often dominated by the non-native Nuttall's waterweed *Elodea nuttallii* there are others that still hold various native pondweeds including the Nationally Scarce and declining flat-stalked pondweed *Potamogeton friesii*.