

NOSTERFIELD LOCAL NATURE RESERVE WARDEN'S REPORT for 2020

The Primary Objectives are:

- To create and improve habitat for breeding waders and waterfowl, particularly Redshank and Shoveler.
- To create and improve habitat for wintering and passage waterfowl and waders.

The Secondary Objectives are:

- To increase the biodiversity of the site.
- To provide public facilities for observation, enjoyment, education and understanding of the site and its wildlife (where they do not compromise the primary objectives).

Management

Flasks and Kiln Lakes and the surrounding area are now under the formal management of LUCT (since 2019) and combined with the main reserve, are being managed under a new Higher Tier Stewardship scheme (from January 2020). Many of the following projects have been carried out under this scheme's auspices; however, national restrictions due to Covid 19 impacted on reserve management and activities were somewhat curtailed.

Reedbed

The major capital works programme, i.e. the delayed second phase of excavation, notably the deepening and widening of ditches, was completed during summer/autumn 2020. In addition, new pools and a reedy island in Flasks Lake were created, using material removed from the reedbed; the intention being particularly to improve habitat for fish and create a richer reedbed mosaic for species such as Bittern.

Grazing

Grazing started at low intensity with cattle on Keith's Field in mid-June. Due to poor growth a hay crop was not taken, the grazing by cattle and sheep continuing until

the end of November. The cattle mostly grazed the grassland surrounding the Main Lake, with sheep grazing on the middle and northern fields.

Fencing and Hedging

Selected trimming along roadside stretches of the boundary hedges was undertaken, in accordance with the Hedgerow Management Plan.

Ragwort and alien plant control

The number of manhours undertaking ragwort control (in accordance with the Reserve's Ragwort Management Plan) were much reduced, due to previous years' hand pulling. Some spot treatment of *Alchemilla mollis* was also undertaken.

Rabbit control

The rabbit population on the Reserve continued to be controlled by trapping and ferreting.

Monitoring and Surveys

The water level on the main Reserve was at 40.96 metres at the start of the year, dropping to an estimated 39.00 metres by mid-July. Autumn rains commencing in late September and continuing to the year-end, lifted the level to 40.63 metres – a difference of two metres.

The monthly WeBS counts were able to continue.

Shooting

Low shooting activities on the Reserve, roughly at a similar level to that of previous years, which does have a short-term impact, but there was no noticeable long-term effect.

Visitors

Visitors were severely curtailed by the Covid-19 restrictions, with hides closed from March until the year-end. The car park was also closed from March to late May,

although the permissive footpath remained open for use by local residents for permitted daily exercise.

Lectures

One well attended talk was given to members of Teesmouth Bird Club at Stockton just before the first Covid lockdown.

Records

Breeding Waders

Seven species of wader bred across all sites, with varying degree of success. Forty-eight pairs of **Lapwing** on the Reserve was a slight increase compared with 2019 (although a proportion again failed and re-laid), from which it is estimated that up to 50 young fledged. Three pairs also nested at Kiln Lake, two pairs hatched young, but all failed due to predation. No more than seven pairs of **Redshank** bred, hatching two broods, although fledging success was unknown. Six pairs of **Avocet** attempted at the Reserve, two failed at the egg stage, a minimum of six young hatched, from which five fledged. Up to five pairs of **Curlew** may have bred - one pair very close to the Reserve lower turning circle, and one pair hatched 2-3 young in a field near the North Henge, successfully relocating the chicks to a field across the Masham road when silage cutting commenced. A minimum of six pairs of **Oystercatcher** bred at the Reserve, from which four young fledged and two pairs also bred at Kiln Lake, but both failed at the egg stage. Three pairs of **Ringed Plover** bred, all hatching young, from which two pairs each fledged three young. One pair of **Little Ringed Plover** hatched three young near the Reedbed (unusual site), which fledged and another pair bred at Lingham Lake, where the adults and three chicks were ringed and fledged.

Breeding Wildfowl

Up to ten pairs of **Shoveler** were present, broods of seven, five and four fledged. An amazing tally of 19 pairs of **Gadwall** were present, several broods hatched and at least 15 from four broods fledged; with one brood of five on the Reedbed. Three

pairs of **Tufted Duck** produced broods of seven, six and two. At least four broods of **Shelduck** were on the Reserve - two broods of eight, one of four and a single; the latter was 'adopted' by the one of the older broods of eight (the age gap was noticeable!). Four pairs of **Great-crested Grebe** bred on the Reserve, broods of two and one on the Main Lake and two broods on the North Lake. Two pairs attempted on Flasks/Kiln Lakes, from which two young fledged. There were two breeding pairs of **Little Grebe** on the Reserve, both fledging two young: three pairs bred on Flasks/Kiln Lakes with just one brood of two. Six pairs of **Coot** nested but few young fledged, whilst four pairs of **Moorhen** bred, but again few fledged.

Other Bird Species

Only single pairs of **Sedge Warbler** were present, with evidence of at least one brood in the Silt Lagoons and several at the Reedbed. Understandably, there were reduced numbers of **Reed Warbler** in the Reedbed following the extensive management work. Two singing male **Lesser Whitethroat** were present in early spring and one pair fledged three young. Nestbox checking was very difficult due to restrictions and it was not ascertained if **Tree Sparrow** bred. Large numbers of **Skylark** were present, high double figure counts of territorial pairs, although breeding was difficult to prove, it appeared to be a relatively successful year.

Up to 380 **Black-headed Gull** nests were counted across the Reserve, and although many failed, a large number of young fledged.

A total of 166 bird species was recorded, 11 more than in 2019 despite the Covid-19 restrictions, which was an amazing count and included three new species: **Pied Flycatcher** and **Hawfinch**, with the highlight of a rare American wader, **Lesser Yellowlegs** which appeared in early January, stayed until the beginning of August, and returned again in mid-October remaining to the year-end. Several notable records included **Great White Egret** and a superb female **Red-necked Phalarope** on the first day the Reserve was opened in May after lockdown! A **Bittern** was reported from the Reedbed, **Raven** was reported on two dates and in early March, a movement of 472 **Whooper Swans** passed through Nosterfield, heading north.

Wigeon numbers in the first winter period peaked at 505, whilst in the second winter period only reached 935.

Butterflies and Dragonflies

A total of 22 species of butterfly were recorded on the Reserve and the area around Flasks/Kiln Lakes. Highlights included **Common** and **Holly Blue**, whilst counts of the Elm-dependant **White-letter Hairstreak** reached two on the Reserve and five along Flasks Lane, with **Purple Hairstreak** also reported in low single figures from Flasks Lane. **Dingy Skipper** were evident in May, with a maximum count of two. In contrast to last year, only odd sightings of **Painted Lady** were reported. **Red Admiral** was scarcer with a handful of records. It was a poor year for the **Wall**, a nationally declining species, with just the odd spring record and four in August. There were several low single figure counts of **Brown Argus** in spring and a second brood in late summer at the Reserve and along the Flasks Lake causeway. The highlight of the year were two **Dark Green Fritillaries** at the Reserve – on 22nd June and 2nd July.

Fourteen species of dragonfly were recorded. The undoubted 'star' for the second year, was **Small Red-eyed Damselfly** recorded between mid-August and early September, with up to ten ovipositing on the East Silt Lagoon. The Reserve's first confirmed record of **Emerald Damselfly** also occurred on the East Silt Lagoon on 1st September. A female **Golden-ringed Dragonfly** at Flasks Lake on 7th August was the third Nosterfield record. **Emperor Dragonflies** were reported from both Flasks Lake and the Reserve, whilst counts of **Four-spotted Chaser** peaked at just four on the Reserve and 20 at the Reedbed. **Black-tailed Skimmers** numbered 50 on the Reserve and ten on Flasks Lake, with single records of **Broad-Bodied Chaser** at both the Reserve and Reedbed. Record counts of 60 **Migrant Hawkers** at both Flasks Lake and the Reedbed on 15th September, included many ovipositing pairs.

Other Insects

Bloody-nosed Beetles maintained their presence along the eastern boundary, particularly in early spring.

Moths

A minimum of three moth trapping sessions were organised from mid-summer, observing social distancing rules etc. Thirteen new species were recorded across all the Nosterfield sites, three 'macro' and ten 'micro' species, taking the total number of species recorded to 635. Of particular interest were Dark Umber, V-Moth (a nationally declining species), *Agriphila selasella*, *Argyresthia spinosella* and *Coleophora alcyonipennella* (very few previous VC65 records of the last three).

Plants

Hundreds of **Northern Marsh** and **Bee Orchid** flower spikes and thousands of **Common-spotted Orchid** spikes were evident, with high numbers of **Common Twayblade**. Strangely, there were few **Pyramidal Orchids** on the Reserve, but a count of over 45 spikes adjoining Flasks Lake.

Also notable was the presence of **Otters**, particularly in the reedbed, but also around Flasks and Lingham Lakes - these enigmatic mustelids have become a regular attraction.

Conclusions

A good year for many species due to better water levels during the breeding season and even with lockdown restrictions, an increase in the number of bird species, saw one of the highest species lists recorded in a year. The Reserve continues to deliver its ecological and community objectives.

Stephen Worwood

LUCT Warden

March 2021