

# Into the Valley The Nene Wetlands

The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire.

# INTRODUCTION

The opening of Rushden Lakes Shopping Centre in the summer of 2017 gave us a unique opportunity to engage with a brand new audience at a place where wildlife, industrial heritage and modern retail culture collide.

Armed with this opportunity, we approached the National Lottery Heritage Fund. Our subsequent success in securing funding for the Into the Valley project enabled us to transform seven adjacent but disconnected post-industrial sites into an accessible new one-square-mile nature reserve managed for wildlife and people - The Nene Wetlands - and develop imaginative trails, interpretation, events and activities that have been enjoyed by people from far and wide, not just shoppers!

The Nene Wetlands sit in the centre of the Nene Valley, and are part of the Upper Nene Valley Gravel Pits Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site. Their mix of flooded gravel pits, wet meadow, wet woodland and reedbed is home to a huge variety of wildlife, but it's the area's bird interest that really puts it on the map. The SPA attracts an internationally important assemblage of 20,000 waterbirds each year, including shoveler, wigeon, gadwall, pochard, tufted duck, coot, cormorant, great crested grebe and lapwing.

The Nene Valley's location on the boundary of East Anglia is of particular biogeographic significance. Many scarce species found here are currently more abundant in the East Anglian Fens, but the historic range of these species in Norfolk and Suffolk is under threat from saline inundation, sea level rise, recurrent flooding and droughts associated with climate change.

If these species are to survive they need to be able to move - and the Nene Valley is the crucial first stepping stone from east to west.

As well as natural heritage, the area is proud of its extensive industrial heritage. It has undergone a circular journey from low intensity farming, through tanning, shoe manufacture, brickmaking, intensive agriculture and gravel extraction, back to a more naturalised state. While quarrying was of local importance, the area's shoe and boot industry was of national, even international, importance; the tanning industry's cattle would have grazed the Nene Wetlands meadows.

The former Northampton to Peterborough railway forms a spine through the Nene Wetlands alongside the River Nene. Opened in 1845, it connected local communities and enabled travel across the whole county and beyond. Working with the East Northamptonshire Greenway, the project has helped make attractive and safe walking and cycling routes available in the heart of the Nene Valley by delivering a key part - Ditchford Bridge to Stanwick Lakes - to reconnect these same communities.

The natural, industrial and social heritage of the area is explained further at the Nene Wetlands Visitor Centre – a first for the Wildlife Trust – a low-lying, grass-roofed building situated right next to Skew Bridge Lake. Although not funded through the project, it has provided an invaluable space from which to educate, inform and inspire visitors young and old, and make sure they get the most from their visit, as well as providing opportunities for us to recruit members and volunteers.



# AIMS

- To create a major new one-square-mile nature reserve from seven disconnected sites, managed for wildlife but introducing new access routes and interpretation for people
- To break down perceived barriers between retail and wildlife experiences by offering imaginative activities and interpretation and developing relationships with retailers
- To increase enjoyment of and interaction with the Nene Valley through street theatre, innovative technology including trail cameras, a wildlife and heritage sculpture trail, a Discovery Area, trails and viewing points
- To increase the number and range of people involved in volunteering on practical conservation tasks, education and engagement activities and in our Visitor Centre
- For the project to act as a gateway to the wider Nene Valley through developing partnerships with neighbouring recreational organisations
- For the project to build on best practice from our earlier National Lottery Heritage Fund projects at Irthlingborough Lakes and Meadows and the Great Fen



# RESTORING THE LANDSCAPE

The ecological designations covering the Nene Wetlands were threatened due to lack of management, urban encroachment, uncontrolled access and antisocial use. The wildlife habitat, including reedbed and wet grassland at Delta Pit, was at risk from lack of management. The site needed urgent work to improve its condition and secure its future for wildlife and people. Species declining due to lack of management included reed buntings and reed and sedge warblers.



### Habitat work and careful management has protected, restored and managed habitats:

- Existing ditches restored and managed and water management improved
- Boundary hedges protected from grazing animals and maintained for wildlife
- Scrub, grassland, reedbed, fen / marsh and lake vegetation managed to prevent succession and encourage biodiversity
- Island vegetation cleared annually to provide nesting habitat
- A heronry protected from disturbance
- Invasive species controlled
- Willows managed to prevent succession
- Conservation grazing regime improved





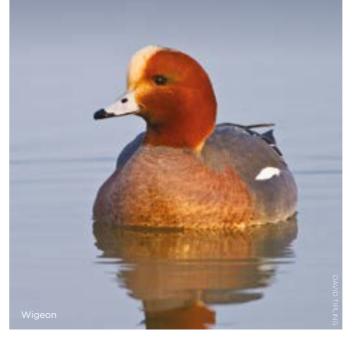
#### **Reedbed restoration**

We restored around one hectare of reedbed across different patches by clearing scrub, sometimes in very difficult ground, and gained at least three reed warbler breeding pairs, which is a significant achievement in an area where reedbed patches are very scarce. Cuckoos, which parasite warblers nests, were attracted to the restored reedbeds and heron chicks have been using them for their first explorations after fledging. We have also seen the occasional bittern, a rare species associated with reedbeds.

"We were very pleased to find three more reed warbler pairs in the reedbed restored area at Delta Pit" Volunteer surveyor

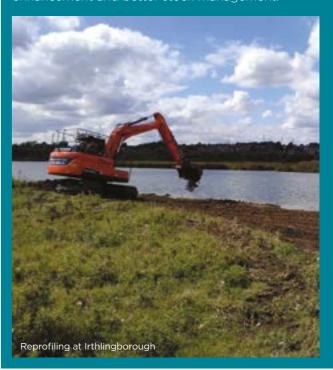
#### Ditch creation

Using a rotary ditcher, we created and re-profiled over 900 metres of ditches in the Irthlingborough area. Our aim was to create shallow water-retaining structures which favour the wildfowl in winter and breeding waders in the breeding season. There has been a clear increase in the use of those structures by wild ducks in winter 2020-2021. This is a really promising start, and we will be introducing further enhancements, such as rotavating the ditch edges, to have the ground in optimal condition in future years.



#### Lake edge earthworks

We re-profiled over 200 metres of lake edges in the Irthlingborough area to improve access for wintering wildfowl to grazing areas. This, along with grassland improvements, is encouraging wintering ducks to graze the fields more consistently. Project work also included the creation of safe access for our vehicles, which will allow for further habitat enhancement and better stock management.



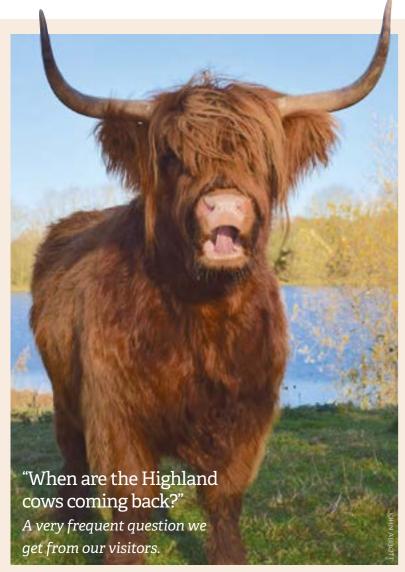
# MANAGING & ENHANCING THE LANDSCAPE

#### **Grassland management**

Through a carefully planned cutting and grazing regime, we significantly improved various grassland compartments, most notably in the Irthlingborough area, where wintering birds such as wigeon have become more frequent in the last two years. We also improved the condition of the grassland at Wilson's Pits resulting in the reduction of invasive species.

The Ditchford area now has a more balanced grassland structure, which will provide wildlife, particularly invertebrates, with more varied opportunities to survive.





#### Grazing

There has been an immense effort from staff and volunteers to help take care of the livestock, with an estimated 1,600 staff and volunteer hours dedicated to stock management in the last four years. Our rare stock breeds have also helped us engage with the general public, who now understand that our cattle and sheep do a fantastic conservation job alongside our rangers. The stock we have been using on site, on average, every year, are:



Highland cattle



**Murray grey cattle:** 5



Angus cross and Hereford cross: 12-15



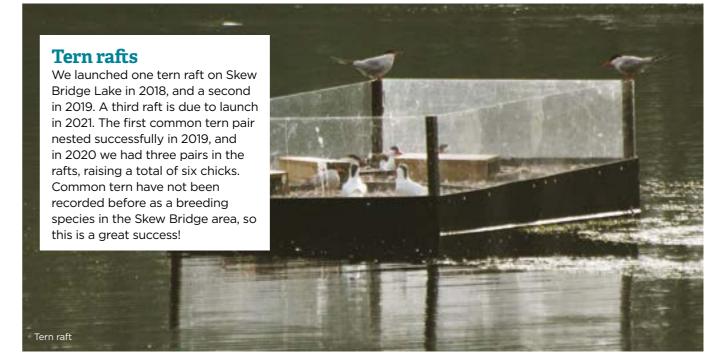
Shetland/Manx/ Hebridean sheep: 100-140

#### Into the Valley has created new habitats











#### Sand martin banks

We installed three sand martin banks with 48 nesting cavities each in 2020. We are confident they will be occupied in summer 2021, and they will really enhance the nesting opportunities for sand martin, a scarce breeding bird in the Nene Valley.



# **MONITORING WILDLIFE**

#### Wintering bird communities

Our winter bird counts during 2018-19 showed some positive differences when compared with counts in previous years. The numbers were the highest recorded since 2016; this result was shaped by local increases in the number of target species such as coot, gadwall, mute swan, and wigeon. We think that this is due to both positive public access management and specific habitat management, and are looking forward to what the future might bring.

#### **Breeding bird communities**

The breeding bird assemblage has remained relatively stable over the last four years, but we have seen slight improvements for target species such as tufted duck, Cetti's warbler and reed warbler.

Grey heron and grey wagtail recovered the numbers of pairs present before the construction of Rushden Lakes. The construction and operation of the shopping centre hasn't brought notable changes in the breeding bird populations in the area, probably due to the development's environmental mitigation plans and public access management.

Little egret bred for the first time ever in summer 2018 and they were back in one of the heronries in 2019, raising at least two chicks. Red kite were recorded breeding on site after more than a century.





#### Otter

These amazing semi-aquatic mammals seem to be back and active in the reserve! We spotted a female with cubs and think there is at least one otter territory on the nature reserve.



#### **Butterflies**

We set up a butterfly monitoring scheme in 2018. The list of butterflies for the site has reached 23 species so far, with very interesting examples such as grizzled skipper, Essex skipper and small heath. We are convinced that the future could bring records of dingy skipper and green hairstreak, as there is potential good habitat for them. The work of our monitoring volunteers has shown that the Nene Wetlands are one of the best places in Northamptonshire to observe brown argus, common blue, large skipper, orange tip and small copper.

#### **Dragonflies and damselflies**

The Nene Wetlands is renowned for the quality of its aquatic habitats which host these amazing flying insects. They generate one of the most amazing wildlife spectacles by flying in clouds of thousands over the water surface. A total of 16 species have been recorded in the area. The ast addition to the list was the willow emerald damselfly, spotted in 2020.



#### **Grass snakes**

Providing grass snakes with log and grass piles for them to hide and lay eggs has enabled populations to remain stable in the woodland glade south of Delta Pit, in the area south west of Higham Lake and at Wilson's Pits.



# ACCESSIBILITY & INTERPRETATION

By connecting previously disconnected large land patches, people have been able to really experience the joys of nature far more easily than before, and this connection has also led to more efficient habitat management. The increase in the number of visitors and their very positive feedback is testament to this change. An all-terrain Tramper is also available to hire from the Visitor Centre.

Into the Valley partially funded the refurbishment of what we call 'The Girder Bridge'. This structure, over one of the flood alleviation channels, was decommissioned around 40 years ago and was in need of repair. Reconnecting the northern and the southern sections of the reserve brought a massive change in terms of public access and the efficiency of our work, and is illustrated every day by the numbers of walkers, cyclists, workers and shoppers accessing work places and shops through the nature reserve, reducing their carbon footprint! A real milestone in the history of the reserve and the area.



#### Path upgrades

Hard-standing surfaces were laid to achieve a continuous network of accessible and safe paths. Some reserve paths have been stabilised and made safer by framing and levelling the ground. The feedback has also been very positive:

"Many, many thanks for doing this. My wife who has mobility problems has been waiting for this moment to visit your site." One of our regular visitors from Irthlingborough.

"I can now cycle for some 20 miles linking various areas along the Nene Valley, without going onto roads."



#### **Boardwalks and footbridges**

We built two boardwalks and repaired a footbridge over wet areas; this has helped maintain connectivity in some areas where access can be difficult in winter.



#### **Visitor counters**

We installed several automatic visitor counters around the reserve. The data they collect is used to measure footfall against the results of wildlife surveys, to make sure we can steer the highest numbers of visitors away from the most sensitive areas.

#### Wildlife and Heritage Sculpture Trail

Our sculpture trail is lined with delightful woodcarvings, some that are large play sculptures and others smaller sculptures to discover around the lake. All depict animals that you will see on the reserve and really connect visitors with the nature they are strolling through.



"My grandchildren absolutely love walking around the lake. Last time they spent 90 minutes looking for all of the animal sculptures. Brilliant place!"



#### Signage

We listened carefully to the feedback from our visitors and improved the navigation around the reserve by installing new fingerposts, way markers and welcome boards. This, along with the information provided by the Visitor Centre, has substantially improved the visitor experience on site.

#### **Digital Interpretation**

As well as our Wildlife Trust website and social media channels, we have live webcam screens in our Visitor Centre where visitors can be enthralled by the comings and goings in nest boxes. The blue tits are a big favourite!



#### Nene Wetlands Trail Interactive Sightings Map

We wanted to provide visitors with more information about the wildlife and heritage of the reserve, and what they might expect to see where. QR codes were added to five strategically placed posts, and at each post visitors are asked to record the wildlife that they can see at that location. Their sightings automatically populate an interactive map on our website and will feed into the local wildlife records office. A children's version of the trail includes an activity booklet to help children learn navigational skills (each post has a plaque that children can take a rubbing of in their booklet).



# **WILD EXPERIENCES –** EVENTS

The Nene Wetlands has proved to be a fantastic place to engage with people of all ages, from the local community and from further afield. The location, facilities and infrastructure make the site easily accessible to people who may not otherwise visit nature reserves, and have allowed us to reach wider audiences including those from more ethnically and socially diverse communities and those with disabilities. We are looking forward to expanding our community engagement activities in the years to come.



#### **Rushden Rangers**

We have teamed up with Rushden Lakes Retail Park and Bakehouse Theatre Productions to offer free, nature-themed, outdoor children's activities in the Nene Wetlands during each school holiday. The sessions are a great way to get shoppers out onto the reserve and so far, every session has been fully booked!

"It's really great to have this on our doorstep. If not for these activities, my kids wouldn't get the chance to go out into nature and learn about wildlife and science. I work for a nursery and the opportunities for getting kids outdoors like this are so limited. I'll definitely try to organise for them to visit the Nene Wetlands!" Parent

#### Climb, Camp, Canoe

Families had a rare opportunity to spend the night on the nature reserve, camping in the Education Area. We teamed up with other leisure providers on site to offer a fully immersive wildlife adventure experience! Activities included bush craft and survival skills, moth trapping, bat detecting, pond dipping, canoeing and indoor climbing.

"This was very well organised, it was great fun and the first time camping for our children. They loved every aspect of the event and loved finding creatures and listening to and seeing the bats at night. Thank you for a wonderful weekend."



#### **Wildlife Detectives**

Our pond dipping and mini-beast sessions are our most popular activities (for all ages!). Attendees are always amazed by the abundance and variety of life found living in and around the lakes. As well as running these sessions for families, we also run them for community groups and schools.

"Thanks so much for accommodating our group. You could tell from the look on the kids' faces when they found the creatures that this will be an experience they talk about for months to come. I'm hopeful it will have sparked an interest in wildlife that will last a lifetime!" Geoff, leader of Grace Communion Church youth group

In 2020, we transformed our Visitor Centre to have better facilities, more space for events and a greater emphasis on engagement and sustainability. We believe these modifications will allow us to engage with even more people in the future and run different activities, including more sustainability events.

#### **Visitor Centre Activities**

Our Visitor Centre family activities are extremely popular. Into the Valley activities have included owl pellet dissection, making bird feeders and building nest boxes. We have also run adult workshops making willow wreaths and other traditional craft sessions.

'We love the activities in the Visitor Centre - we pretty much live here during the school holidays!'

"My daughter enjoyed making her bird feeder on Tuesday, she's been sitting watching out the window for birds every morning." Coral Jade Oldham



#### **Little Bugs Go Big!**

Working with a local theatre group, LOL Theatre, Into the Valley meant that we could bring a fresh twist to our usual bug hunting sessions. The theatre sessions were led by animal characters found in the Nene Wetlands and, as well as looking for real bugs, encouraged children to show what they had learned through story-telling, games and role play.



#### **Seasonal Trails**

Seasonal trails continue to be a great way to get families exploring the reserve throughout the year. We offer a different seasonal trail for each school holiday.



# WILD EXPERIENCES

The Nene Wetlands is a fantastic place to look and listen for bats. Without even leaving the shopping complex, you can see noctule bats emerging from their roost sites and, within a few metres of the reserve entrance, you can see and hear pipistrelles hunting around the Discovery Area. Bat walks are one of our most popular events and, because of the easily accessible paths, can be attended by all ages, as well by people with disabilities.

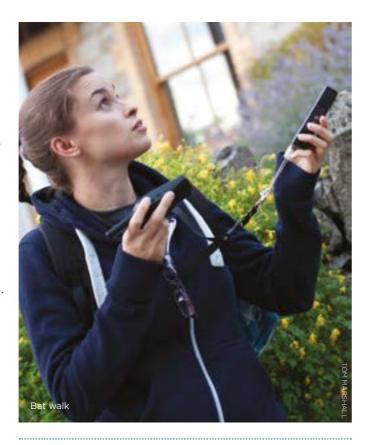
"Thanks so much for this evening, it's been fantastic, although my son says you should rename it the 'bat, toad and stargazing walk'!" (parent)

#### **Family Forest School**

These popular family sessions, inspired by the Forest School movement, encourage children to take the lead when exploring the natural world. We aim to show parents how to facilitate safe exploration, which is well known to have countless benefits for child development.

"My son and I attended the Family Forest School session this morning and just wanted to drop a note to say thank you for a lovely morning. We both really enjoyed it and the variety of activities on offer was brilliant. The site is fantastic and it was nice to be able to explore and do what my son chose to do by ourselves but with help on hand if we needed it. We hope to be able to attend similar events in the future. Thank you again." Becky (parent)





#### **Education Area**

Our education area has a unique wooden shelter and pond-dipping platform and is located in a lovely woodland glade. From pond dipping and mini-beast hunts to Forest School activities we have hosted community groups including schools, Scout/Guide groups, children's holiday clubs and social groups for people with disabilities. Many of them come back for a repeat visit.



#### **Higham Gateway Disabled Group**

Higham Gateway is a social club for adults with physical and or learning disabilities. Into the Valley delivered interactive sessions including:

- Planting mini wildflower meadows and making seed bombs
- Making bird feeders
- Making decorations to help birds see windows
- A bat walk in the Nene Wetlands

"It's fantastic that there's the opportunity for us to do something so special, right on our doorstep. I think the leaders enjoyed it just as much as the group members!"

Carer of attendee, Higham Gateway group for disabled adults



#### Little Bugs Club and Wild Tots

Our monthly toddler groups run throughout the year and get preschool children engaging with nature through play, stories, crafts and exploration!

"I can't believe the transformation in Bailey in the space of 90 minutes! From a nervous start, he now doesn't want to leave! Thank you so much." Lisa (childminder attending Wild Tots)



#### Outreach

Into the Valley delivered outreach sessions to schools, Scout groups, care homes and disabled groups. This included a visit to Denfield Primary School, who invited us along to present an assembly about the challenges facing wildlife as part of World Book Day (they had been studying the Wind in the Willows).



# **VOLUNTEERS**

#### **Conservation volunteers**

The Into the Valley project has brought us over forty committed volunteers, who support us with a huge variety of tasks around the reserve: practical habitat management; providing information to visitors and regular users of the site; litter picking; livestock checks; guided walks; repairs and maintenance; machinery checks; wildlife surveys; liaison with local communities; and incident reports, to name a few!

"Regarding volunteering, I would like to say how much I enjoy the Tuesday sessions. I have been birding these pits for around 35 years now and almost regard them as a second home. I was not very pleased when the Lakes development went ahead but the Trust has had a superb influence on this reserve since. So I feel as though I am putting something back on these volunteering days, one of the main reasons I do it, apart from the pleasure of course. Another reason is that I want to help, as much as possible, to make this area one of the best nature reserves going."

"Volunteering - huge impact - opening up entirely different opportunities - especially for learning about wildlife and conservation management. In particular it was a really great way to transition into retirement. Regular weekly commitments to provide some structure to life, a great new team of people to meet, the level of physical activity helps keep me fit."



"To watch the volunteers – their sincere involvement in conservation, their cooperation, their friendship, seeing how they are captivated by the natural world and how they share this joy with others – is a very heart-warming human experience, well beyond simple nature conservation." *Toni Castello, Senior Ranger* 



#### **Communities & Wildlife volunteers**

Into the Valley has created a team of dedicated and experienced volunteers who help with the running of our Visitor Centre, activities, events and membership recruitment.

As a result of volunteering, two of these volunteers are now paid Casual Wild Learning Officers and two are currently undergoing Level 3 Forest School Training. This will allow us to expand further our community engagement in the Nene Valley in the coming months and years.

"Volunteering at the Visitor Centre has been a brilliant addition to the voluntary work I do. It is a very different setting and the atmosphere in the centre is always welcoming to both the staff and the customers. Personally, volunteering here has meant I have met some amazing people and made some friends - particularly those I have worked with on a regular basis. Even if I feel a bit fed up when I arrive, it doesn't take long to be laughing and enjoying good, sincere company. I have also learnt a lot more about the wildlife on the site and loved watching the blue tits hatching and fledging last spring."



"I started volunteering here in July and really enjoy coming in. I suffer from anxiety but the moment I walked in to the centre I completely relaxed. Katie and the team are so kind and welcoming. I don't think I've ever done the same thing twice and I love helping the children (and adults) learn about nature. It's really brought out my creative side and it's helped my confidence no end. I really enjoy waking up in the morning knowing that I'm coming in to help. I feel as though I'm making a difference to the charity and the charity is helping me. Thanks so much!" Julia French, Volunteer (and now Casual Wild Learning Officer)



#### Work experience

After offering a successful enrichment programme for students in 2018, we continued to work closely with Sir Christopher Hatton Academy in Wellingborough to support their work experience programme and gave placements to two students in 2019.

Following her placement with us, one of the work experience students, Faith, is now studying Animal Care at a local college and still regularly comes back to volunteer with us in the Nene Wetlands.

"Thank you for taking me on during my work experience and not only giving me knowledge that will help me in the future along with experience but also highlighting how important nature is and how to preserve it" (Work experience student from Sir Christopher Hatton Academy)

# PARTNERS & SUPPORTERS

#### **Financial support**

- LXB
- East Northants Council
- Rockingham Forest Trust (Stanwick Lakes)
- Northwick Trust
- Nene River Church
- Tesco Bags of Help
- William Haddon Charitable Trust
- Clark Bradbury Charitable Trust
- Wyvill Charitable Trust
- Frederick and Phyllis Cann Trust
- Maud Elkington Charitable Trust
- SDC

The Nene Wetlands is an excellent example, showing that good planning and information can bring very positive results to complex projects"

A Senior Advisor from



#### Other support and partnerships

We were delighted to be able to work with Savills, Rushden Lakes' Management Company, to offer wildlife-themed community engagement activities to the public for free. Savills had a small budget for community engagement on the site and, rather than bringing in a third party to organise these, we were able to work together to offer a series of free events to local families during the school holidays, funded by the retail park and branded 'Rushden Rangers.' These have been very successful and we really hope that this arrangement will continue long term.

We have had successes with some of the smaller stores and leisure companies. We ran some in-store wildlife challenges with White Stuff (helping families make nest boxes during National Nest Box week), and we worked with Rock Up on our Easter Egg trail (find the golden rock and win a free climb!), and as part of our 'Climb, Camp, Canoe' event. Going forward, we would like to work more with the leisure providers to provide educational packages to schools and community groups and some of the food/drinks outlets with regard to fundraising evenings or experience packages.

- Irthlingborough Archaeological Society (digs)
- Rotary Club of Rushden (planting and restoring hedgerows)
- Rotary Club of Rushden Chichele (planting and restoring hedgerows)
- Friends of the Nene River (creating a natural mooring)
- Nenescape (Farming for the Future project location for events and loan of a rotary ditcher)
- Statutory bodies such as the Police, East Northants Council, Fire Service, Environment Agency, Natural England, Western Power.
- Canoe2 (help with installing tern rafts and with water-based management tasks)
- Bosworth's Garden Centre (provided planters and staff to help with events)
- Cotswold Outdoor (promotion instore)
- Opticron (optics days)
- Evan's Cycles (collaborated to develop cycle route map)
- The Crown Estate
- House of Fraser

"The Savills team at Rushden Lakes have built a close and extremely positive working relationship with The Wildlife Trust BCN. We are in regular contact with Katie and the onsite team sharing information and insight regularly. We are able to support in raising the awareness of not only the beautiful surroundings here, but the importance of The Wildlife Trusts' work in protecting our environment and nature. We have also been able to share our footfall with the Nene Wetlands Visitor centre and able to promote the great membership benefits and activities that they have to offer, with the vast range of visitors and employees here at Rushden Lakes. Talking with the team opens your eyes as to what we have here on our doorstep amongst the flora and fauna, across the water and so much to share with our visitors." Savills



# **HIGHLIGHTS IN NUMBERS**

#### **Habitat restoration...**





3 new pairs of reed warbler 1 new pair of cuckoo. Bittern sightings



**Common terns** breeding at Skew Bridge for the first time



+900m of ditches newly created



+200m of lake edges re-profiled



3 sand martin banks installed with 48 nesting cavities available





We have engaged with over 10,000 people of all ages



We have delivered over **300 events** 



**Nathusius' pipistrelle** new species for the site and the local area

23 species recorded butterflies

Some rare species found: grizzled skipper, Essex skipper, small heath



+1500 m of tracks improved



+250m of fences installed



16 species of dragonflies and damselflies recorded so far

Increases in numbers for coot, gadwall, mute swan and wigeon



Red kite breeding on site after decades of absence



Local businesses 15 local suppliers used on a monthly basis **25-30 local suppliers** used every year





Bedfordshire Cambridgeshire Northamptonshire

