

# Carlton Marshes

## Visitor Centre Report



### An Evaluation Report for Suffolk Wildlife Trust 2023

Report authors:

Dr Caroline Harvey and Dr Fiona Holland

Nature Connectedness Research Group



## **Table of Contents**

Acknowledgements	3
Executive Summary	4
1. Introduction to the evaluation context	6
2. Evaluation Methodology	7
3. Results	8
4. Conclusions	19
5. Recommendations	20
6. References	21
7. Appendix	22

## **Acknowledgements**

The report authors would like to thank the Suffolk Wildlife Trust staff for their support in the production of this report in particular Sara Holman and Christine Luxton along with the various staff responsible for promoting the survey and supporting data collection.

All images used in this report are reproduced courtesy of Suffolk Wildlife Trust.

The land purchase, habitat restoration, visitor construction and activity plan were funded by National Lottery Heritage Fund. Additional funding was secured from other funding sources, including DEFRA Green Recovery Challenge Fund for work beyond the Heritage Fund project. This report was funded by National Lottery Heritage Fund.

## **Executive Summary**

Suffolk Wildlife Trust received National Heritage Lottery funding of £4.2 million, with an additional £1 million being raised by the Trust, their partners, local people and businesses. This enabled Suffolk Wildlife Trust to create 1,000 acres of nature reserve to support local wildlife and benefit the local community. The Carlton Marshes visitor centre was officially opened in May 2021, having been delayed by the impact of the Covid 19 pandemic.

The University of Derby Nature Connectedness Research Group was commissioned to evaluate the impact of the Visitor Centre and find out more about how the visitors feel about the reserve.

Data was collected at 3 time points, once before the visitor centre opened, and then again during 2022 after the visitor centre opened and finally during late 2022 and 2023.

Participants completed questionnaires which asked them about their experience of visiting Carlton Marshes, along with measures of nature connectedness and pro-nature conservation behaviours. An open question about what would help them to visit the site more often was also included.

In total 153 participants completed questionnaires.

Overall, participants found the reserve to be very accessible, both in terms of finding it easy to get to, and in moving around the site. They also found it affordable and welcoming.

Participants were asked what would help them to visit Carlton Marshes more often. Prior to the opening of the visitor centre, key themes included improvements to paths and trails, provision of refreshments and a café, seating, maps and signage and more organised activities. After the visitor centre and café had opened, and various improvements had been made, feedback was very positive. Many participants commented on how much they enjoyed visiting the reserve, and on the improvements to the facilities, paths and trails. There were also a number of suggestions for how further improvements to the site, café and visitor centre facilities could be made.

Most people had travelled to Carlton Marshes by car, with only a small percentage arriving on foot or by bicycle and most were visiting with another person or as part of a larger group.

Participants were asked about how confident they felt to visit the reserve again in the future, and in knowing what to do at the reserve and in taking part in organised activities. Overall confidence levels were fairly high, although some participants were a little less confident in taking part in the organised activities.

The nature connectedness levels for participants were high across all three groups, showing that most people taking part in the survey felt very connected to nature. The pro-nature conservation scores were all above the mid-point for this measure, so although participants reported engaging with some pro-nature behaviours there was scope for this to be increased.

Participants also reported high levels of enjoyment from visiting Carlton Marshes.

Several recommendations have been derived from participant responses which relate to the following:

- Broaden the visitor demographic
- Maximise social medial presence
- Continue to offer free parking and access to the reserve
- Consider increasing activities
- Promote pro-nature conservation
- Review café provision
- Increase the range of accessible paths
- Consider additional signage around the site
- Transport links

In conclusion, the visitor centre, facilities and accessible paths and trails around Carlton Marshes reserve have had a hugely positive impact for visitors. Many people taking part in this evaluation provided very positive comments about the site and impact of the visitor centre and facilities. They were also asked to provide feedback about what would help them to visit more often, and these comments will prove particularly useful to SWT in considering next steps for the reserve in the future.

## 1. Introduction

Carlton Marshes are located in the Waveny Valley, forming part of the Suffolk Broads. They are described as the Southern Gateway to the Broads National Park, recognizing that many visitors are not aware of the National Park on their doorstep. In 2018 Suffolk Wildlife Trust received National Heritage Lottery funding of £4.2 million, with an additional £1 million being raised by the Trust, their partners, local people and businesses. This enabled Suffolk Wildlife Trust to achieve its vision of creating 1,000 acres of nature reserve to support local wildlife and benefit the local community. Additional funding was secured for phase 2 work beyond the National Lottery Heritage Fund project, including £247 000 from DEFRA Green Recovery Challenge Fund (via National Lottery Heritage Fund) for an Assistant Warden position, surfaced footpath extension of approximately 1000m, an accessible viewpoint, a viewing platform and habitat creation and restoration.

The visitor centre was officially opened in May 2021, having been delayed by the impact of the Covid 19 pandemic. The visitor centre provides both facilities for visitors and serves as an education centre, encouraging people to learn more about this special landscape and wildlife. The centre was designed to maximise panoramic views of the reserve, support community engagement and inclusive access and is connected to a network of accessible paths and viewpoints.

The aim for the Trust was to provide visitors with an inspirational starting point from which to explore the Broads National Park, with facilities that encourage more people to discover, explore and engage with the reserve, local nature and the wider landscape.



There is a well-established research base demonstrating the benefits of connecting with nature for health and well-being in both adults (Howell, et al., 2011; Nisbet et al., 2011; Pritchard, et al., 2019) and children (Mayer and Frantz, 2014, Capaldi, et al., 2014; and Capaldi, et al., 2015) with studies demonstrating a variety of benefits to health and wellbeing associated with connecting with nature. For example, Keniger, et al. (2013) conducted a review which detailed a range of positive benefits associated with interacting with nature including psychological benefits such as improved self-esteem, mood, emotions and behaviour. Other benefits included improved cognitive performance and better physical health as evidenced by reductions in stress. The review also highlighted the social benefits from interacting with nature, particularly where it can facilitate social interaction. Finally, spiritual benefits from spending time in

nature were also noted. Given the range of benefits that may be derived from spending time in and connecting with nature, simple interventions such as the development of the Carlton Marshes visitor centre, which encourages people to spend time outdoors and develop greater connectedness to nature, are valuable.

Suffolk Wildlife Trust (SWT) wanted to explore the impact of the visitor centre at Carlton Marshes, and to understand more about their visitors, with a view to enhancing the visitor experience for the future.

The University of Derby Nature Connectedness Research Group were commissioned to undertake an evaluation of the Visitor Centre and find out more about the people who visit Carlton Marshes.



## 2. Evaluation methodology

The evaluation was co-created with SWT and it allows us to understand more about the visitors to Carlton Marshes. The research was approved by the University of Derby College of Life and Natural Science Research Ethics Committee and questionnaire data was collected at three time points: Time 1 - during September 2020-April 2021 (prior to the opening of the Visitor Centre); Time 2 - February 2022-September 2022; and Time 3 - during November 2022-July 2023.

Participants were recruited at Carlton Marshes reserve through posters placed around the visitor centre, on tables in the café and on notice boards. The posters advertised the opportunity to take part in the research project which required them to complete an online survey. Welcome volunteers at the entrance to the visitor centre also signposted visitors to the survey and invited them to take part. This survey was accessed through a QR code which could be scanned with a smartphone or tablet, or via a web link. Tablets were provided in the visitor centre for any participants who did not have their own smartphone.

Participants provided a range of demographic data and answered questions which asked how they travelled to Carlton Marshes, who they visited with and what kind of activities they engaged in during their visit. Information about accessibility to the site and confidence in visiting was also explored.

The confidence questions tapped into how confident participants felt about visiting Carlton Marshes again the future, how confident they felt in knowing what to do when visiting again, and how confident they were to take part in an organised activity during their next visit. All of these questions were measured on a 0-10 scale, with a higher value indicating higher levels of confidence.

The Nature Connectedness Index (Richardson et al. 2019) which includes 6 questions, was used to measure levels of nature connectedness. Questions include for example, “Being in nature makes me very happy” and responses are scored from 1 (Completely disagree) to 7 (Completely agree). Once the overall scale score is calculated, participants can score between a minimum of 1 and a maximum of 7, with 7 representing the highest level of nature connection.

Pro-nature conservation behaviour was measured using 5 items adapted from Richardson et al. (2015) which asked about various activities participants might engage in, for example, “I put food out to feed garden birds”. Participants answer either “yes” or “no” and the total number of “yes” responses provides an overall score which can range from 0-5 with a higher score indicating greater engagement with pro-nature conservation behaviours.

Finally, participants provided information about how much they had enjoyed their overall experience at Carlton Marshes. This was captured via a scale of 0-10 where 0=not at all enjoyable and 10=extremely enjoyable.

A full copy of the questionnaire is included as an appendix.

### 3. Results

#### Participant details

Participants completing the survey provided a range of demographic information. All participants were aged over 18 years and full details of the participants age, gender and ethnicity are shown in table 1.

*Table 1: Demographic details and sample sizes for participants across the three time points*

		Time 1	Time 2	Time 3
<b>Number of participants</b>		<b>61</b>	<b>40</b>	<b>52</b>
<b>Age</b>	<b>Range (years)</b>	20-81	25-84	26-79
	<b>Mean (sd)</b>	56.1 (14.8)	54.1 (13.7)	52.9 (14.7)
<b>Gender</b>	<b>Male</b>	22 (36.1%)	6 (15.0%)	20 (38.5%)
	<b>Female</b>	38 (62.3%)	33 (82.5%)	31 (59.6%)
	<b>Prefer to self-define</b>	0 (0%)	0 (0%)	0 (0%)
	<b>Prefer not to say</b>	1 (1.6%)	1 (2.5%)	1 (1.9%)
<b>Ethnicity</b>	<b>White</b>	59 (96.7%)	36 (90%)	50 (96.2%)
	<b>Black</b>	0 (0%)	0 (0%)	0 (0%)
	<b>Asian</b>	0 (0%)	0 (0%)	0 (0%)
	<b>Mixed or multiple ethnic group</b>	0 (0%)	1 (2.5%)	2 (3.8%)
	<b>Other ethnic group</b>	1 (1.6%)	1 (2.5%)	0 (0%)
	<b>Prefer not to say</b>	1 (1.6%)	2 (5.0%)	0 (0%)

There was a broad age range of people completing the questionnaire at all time points, with the average age falling in the 50-60 age range. The majority of participants were female with between 59-83% identifying as female across the 3 time points. In terms



of ethnicity the 3 groups were predominantly white, with only a very small number of participants identifying as mixed or multiple ethnic group or as an other ethnic group. None of the participants taking part identified as Black or Asian.

### Accessibility and mobility

Participants were asked if they were disabled. At Time 1, prior to the opening of the visitor centre, 4 participants (6.6%) classed themselves as disabled. At time 2, 1 participant (2.5%) identified as disabled whilst at time 3, 2 participants (3.8%) classed themselves as disabled.

Participants were also asked if they had any mobility problems that might affect their ability to access facilities whilst visiting Carlton Marshes. At Time 1, 3 participants (4.9%) reported some mobility problems, whilst at time 2, 2 people (5.0%) reported mobility problems compared with 1 person (1.9%) at time 3.



We also asked how easy visitors found it to get to Carlton Marshes and how easy they found it to get around the site. These questions were scored from 0-10 with a higher score indicating a higher level of accessibility e.g., that it was very easy to get to Carlton Marshes or to get around the site. They were also asked how affordable it was to visit where a higher score indicates greater levels of affordability. Similarly, when asked how welcome they felt visiting the site, a higher score corresponds with feeling more welcome. Results are shown in table 2 and indicate that across all three time points people found Carlton Marshes very accessible to visit and also felt very welcome when they visited.

*Table 2: Means (sd) for how accessible people found Carlton Marshes*

	<b>Time 1</b>	<b>Time 2</b>	<b>Time 3</b>
How easy was it to get to Carlton Marshes?	8.73 (2.13)	7.70 (3.23)	7.53 (3.45)
How easy was it to get around the site at Carlton Marshes?	7.66 (2.62)	7.05 (3.26)	7.63 (3.41)
How affordable was it to visit Carlton Marshes?	9.29 (1.11)	8.20 (2.65)	8.04 (2.59)
How welcome did you feel at Carlton Marshes?	8.36 (2.08)	8.13 (2.82)	8.78 (2.04)

## Frequency of visits

Participants were asked about how frequently they visited Carlton Marshes and details are shown in table 3. At time 3 a smaller percentage of participants are visiting at least fortnightly compared with times 1 and 2.

Table 3: Frequency of visits to Carlton Marshes

	Time 1 (%)	Time 2 (%)	Time 3 (%)
Most days	6 (10.3%)	1 (2.6%)	0 (0.0%)
Weekly	11 (19.0%)	7 (18.4%)	6 (11.8%)
Fortnightly	8 (13.8%)	3 (7.9%)	4 (7.8%)
Monthly	11 (19.0%)	8 (21.1%)	7 (13.7%)
A few times a year	16 (27.6%)	11 (28.9%)	17 (33.3%)
Annually	3 (5.2%)	0 (0.0%)	2 (3.9%)
Less than once a year	0 (0.0%)	0 (0.0%)	2 (3.9%)
<b>Total</b>	<b>38</b>	<b>58</b>	<b>51</b>

Participants were also asked to highlight what would make it easier for them to visit Carlton Marshes in the future. Data from the open question was coded using a descriptive thematic analysis.

The following analysis outlines the themes in more detail and includes verbatim extracts from participants. In some cases, words have been inserted to clarify meaning. This is annotated with [ ].

### Time 1: What would help you to visit Carlton Marshes more often?

Prior to the opening of the visitor centre, responses fell into two broad themes: Provision of facilities and external factors. Within these themes, several subthemes were identified:

#### Theme 1: Provision of facilities to support access

1. Visitor centre facilities
2. Seating
3. Paths and trails
4. Maps and signage

#### Theme 2: External factors

5. Organised activities
6. Better weather

### Theme 1: Provision of facilities to support access

#### 1. Visitor centre facilities

Eleven participants reported that improved facilities and the opening of the new visitor centre would encourage them to visit more frequently noting that *“it will be good when the facilities are open.....especially a toilet”* and that *“once the new visitor centre opens”* they would visit more often. The importance of *“refreshments”* and an *“improved café service”* were also suggested.

Some participants noted that the opening of the visitor centre would help to improve accessibility of the site for some with one participant noting that:

*"I have [an] elderly mother whose walking is not good she would love to visit too, but hasn't done yet, so looking forward to the new visitor's centre so hopefully she can take part there too."*

## 2. Seating

Provision of seating and having somewhere to stop and rest or take in the view was noted by 7 participants as something that would help them to visit more often with one suggesting that it would be helpful to have:

*"More seating available for those in our party who can't walk a distance, either to pace themselves or just get to [the] site, sit and enjoy [the] view."*

This also helps to highlight the importance of seating to enhance accessibility of the reserve for people who might find it difficult to walk longer distances without a rest. One participant noted it would be helpful to have *"some seats for my husband who has limited walking"* whilst another also emphasised the need for seating to support accessibility: *"Although mobile, I have chronic pain syndrome and would like to be able to rest for a few minutes"*.

## 3. Paths and trails

Six participants suggested improvements to the paths and trails would help them to visit more often. Some noted that *"muddy and waterlogged paths"* could make it difficult to access some areas of the reserve. For example, one participant suggested that the reserve would benefit from *"more walkable recreational footpaths - some are impassable in the wet"* and another noted that it would help to have *"better footpaths around the site for [the] mobility scooter to travel around"*.



## 4. Maps and signage



Increased provision of *"better maps and signage"* was suggested by 3 participants to help visitors navigate around the reserve, with one participant noting that *"easily accessible maps of the marshes and an explanation that you can't walk all the way around the trails"* would be helpful and another suggesting they would like to see *"clearer signs to [the] direction we are walking and what we might find!"*

## Theme 2: External factors

### 5. Organised activities

Provision of organised activities was identified by 4 participants as something that might help them to visit more often with one asking for “*more activity days*” whilst another suggested that advertising events would also help “*If there are events advertised for me and or younger grandchildren I would probably come more often*”.

### 6. Better weather

Two participants noted that “*sunny weather*” and “*good weather*” would help them to visit more often, with a further participant commenting that “*We were caught in heavy rain with nowhere to shelter*”. This helps highlight the importance of areas where people might shelter from the weather such as the new visitor centre.



## Time 2 and Time 3: What would help you to visit Carlton Marshes more often?

Initially, the time 2 and time 3 data were analysed separately, however it was apparent that there was a high degree of overlap in the themes identified in both data sets, so the results for time 2 and time 3 in response to this question are presented together.

Whilst there are some similarities between the themes identified pre-pandemic and those in the time 2 and time 3 data, the impact of the opening of the café and visitor centre also becomes apparent in the time 2 and time 3 analysis.

In exploring the combined data set, 3 overarching themes were identified, firstly praise for the site and changes that had been made, secondly improving facilities and activities and thirdly external factors. Several subthemes were identified within theme 2 and theme 3 as detailed below:

### Theme 1: Praise for the site and changes that had been made

### Theme 2: Improving facilities and activities

Improvements to paths and trails

Increased activities

Improvements to the café

### Theme 3: External factors

Living closer

Better weather

Public transport

## Theme 1: Praise for the site and changes made

Overall, 16 participants made positive comments about the site and their experience, with a number suggesting that no changes were needed to help them visit more often. The impact of the facilities was noted by several participants, for example: *“I enjoyed walking down with the dog having a rest and something to eat, a wander then back home. I have some difficulty walking and the rest in the verandah is perfect.”*



General positive feedback was provided by several participants for example: *“we visit often as we love it so much”; “I love it here”; “it is my favourite place”; and “I think you are doing a great job”.*

There was also praise for the staff with comments such as: *“Staff are amazing. They offer so many events to educate and inform. The volunteers all talk to you and tell you what they have seen each visit. The cafe staff are so friendly.”*

One participant also commented that: *“Everything is here that I need, fabulous hides..... Paths are accessible to me in most areas most of the year. Car parking if I need it although tend to walk down with dog. It has definitely been improved”.*

Another visitor noted the impact of not charging for parking or the visit *“Thought it was very helpful to be able to visit free, but equally to be able to make a donation very easily, which we did.”*

Finally, the impact of the site for one participant and their husband demonstrates what an impact the reserve can have for some visitors:

*“We visit almost daily. We have done since the start of lockdown. We call it our Happy Place. My husband has since been diagnosed with a brain tumour & increasingly Carlton Marshes is his go to place as he feels safe there and knows it is easy to walk round and the visitor centre serves great coffee.”*



## Theme 2: Improving facilities and activities

In total, there were twenty-two suggestions for how things might be improved at Carlton Marshes.

### 1. Improvements to paths and trails

Seven participants commented on the paths and trails around the site, including both positive and negative comments. For example, one participant commented that: *“It was very muddy [in] places, [but] where it has been paved it was amazing. I fully understand it is marshes but pathing the muddy places if possible would be amazing.”* And another commented on the *“well surfaced paths throughout the reserve.”*

One participant suggested some additional improvements for wheelchair accessibility *“Drops off board walk [and] bridges..... were generally in excess of 15mm, [so are] very bumpy for wheelchairs.”*

Another participant also gave suggestions in relation to wheelchair users:

*“All paths serviced and accessible. I have a wheelchair using family member so we can't access the river side of the marshes and their hides easily as the path is not wheelchair friendly. We would like to explore this area more but for now are limited to the managed path areas”.*

Other more general suggestions from participants included things such as *“more benches on walk”* and *“a cycle track around the nature reserve”*.

### 2. Increased activities

Six participants suggested additional activities would help them to visit more frequently, suggesting both activities for children and adults. For example, one participant asked for *“A little more to do with toddlers”* whilst another commented that *“We visit weekly - more toddler activities like picture trails or hunts etc.”* would help them to visit more often. Furthermore, another participant suggested that *“a slow walk with someone that can explain all the different animals and birds”* would help.

There was positive praise for existing activities, with one participant asking for more of these:

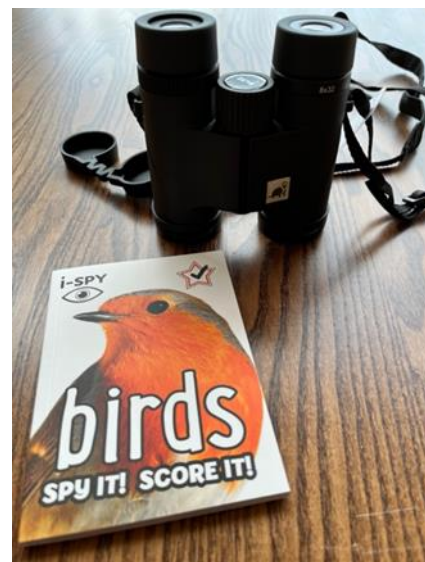
*“[the] kids enjoy the activities so more of them would be great. my son tried the wild explorers club for the first time and loved it. would like them more often as sometimes we miss the one that's on due to a clash with something else then he has to wait a long time until the next one.”*



More specific activities were suggested by two participants:

*“I would also come more frequently if there were activities for adults e.g., pond dipping, Dawn Chorus walks”*

and *“Be good to have as part of a web app that you can access via a QR code a digital seasonal page that can show you the birds and animals to watch out for as you walk around the marshes. Maybe even an audio guide at some of the key areas around the marshes could be interesting to tell you more about the history of the marshes and the nature that lives and visits it.”*



### **3. Improvements to the café**

Seven participants made suggestions for improvements to the café, suggesting if these were addressed, they may visit more often. For example, one participant highlighted costs: *“less expensive catering”*, whilst another commented on the opening times: *“Longer opening hours in cafe - we arrived at 2.30 and cafe closed at 3”*.

The range of food on offer was picked up by two participants who commented that: *“The cafe food was very limited”* and *“If it sold more variety of lunch time food, I would come to meet friends here for lunch, too”*.

The speed of service in the café was also commented on with one participant commenting:

*“Speed up the service in your café..... on [this] occasion it has definitely stopped my purchasing anything”*.

Finally, two participants would like to see access to the café for dog walkers, with one commenting that *“Allowing dogs in cafe in certain areas”* would help them to visit more often.

### **Theme 3: External Factors**

Several external factors were present as themes in the data. These are not something that can be addressed by SWT but do help to enhance understanding of what might prevent people from visiting more often.

#### **4. Living closer**

Twelve participants commented that they would visit Carlton Marshes more often if they lived closer for example: *“We just wish we lived closer”*.

#### **5. Weather**

The impact of the weather was noted by 3 participants who suggested that *“better weather”* would help them to visit more frequently.

## 6. Public Transport

Two participants suggested improvements to public transport to the site would help them visit more frequently with one expanding on this:

*“A bus service into your site, to open up accessibility for disabled users and buggies. You have a bus drop off point in the car park. Perhaps something could be done in conjunction with First bus, especially in the summer months. The track and path is not easy for wheelchair or buggy users.”*

### Details about the visit to Carlton Marshes

#### Travel to Carlton Marshes

The most common way to travel to Carlton Marshes was by car, followed by travelling on foot and by bicycle. Prior to the opening of the visitor centre, 52 (85.2%) travelled by car, 8 people (13.1%) arrived on foot and 1 person (1.6%) travelled by bicycle.

At time 2, 31 people (77.5%) travelled by car, 6 (15.0%) arrived on foot, and 2 people (5.0%) arrived by bicycle. Similarly at time 3, 43 participants (82.7%) travelled by car, 6 participants (11.5%) arrived on foot, 2 participants (3.8%) arrived by bicycle and 1 person arrived by train (1.9%).



#### Who did you visit Carlton Marshes with?

Participants were asked if they had visited as part of a group and if so, what ages were the people they visited with. Details are shown in table 4.

*Table 4: Information about the nature of groups people visited with across the three time points*

	Time 1	Time 2	Time 3
Total visiting in a group	45 (73.8%)	35 (87.5%)	47 (90.4%)
Mixed adults and children	10 (22.2%)	10 (28.6%)	21 (44.7%)
Adults of similar age	31 (68.9%)	20 (57.1%)	10 (21.3%)
Adults of different ages	4 (8.9%)	5 (14.3%)	16 (34.0%)



## Confidence when visiting Carlton Marshes

Three questions were used to assess confidence in visiting Carlton Marshes which were measured on a 0-10 scale with a higher score indicating a higher level of confidence. i) How confident are you in coming to Carlton Marshes again; ii) How confident do you feel about knowing what to do when visiting Carlton Marshes in the future; and iii) How confident do you feel about taking part in one of the organised activities in the future?

Table 5: Confidence when visiting Carlton Marshes in the future

	Time 1	Time 2	Time 3
How confident are you in coming to Carlton Marshes again?	8.59 (2.66)	7.34 (4.08)	8.98 (2.47)
How confident do you feel about knowing what to do when visiting Carlton Marshes in the future?	8.26 (2.54)	5.47 (3.78)	8.94 (2.40)
How confident do you feel about taking part in one of the organised activities in the future?	5.09 (3.46)	7.00 (3.96)	6.84 (3.39)

Table 5 shows that across all three time points participants were very confident in coming to Carlton Marshes again. However, although participants at time 1 and time 3 were also very confident in knowing what to do when they visited the reserve, participants at time 2 were less confident. When considering how confident people felt about taking part in an organised activity in the future confidence levels were a little lower, particularly at time 1. In all cases, confidence is above the mid-point of the scale, so overall participants are feeling reasonably confident in all three areas.



## Nature connectedness and pro-conservation behaviours

Levels of nature connectedness were measured across the three time points and are shown in table 6. Nature connectedness scores range from 1-7 with a higher score indicating higher levels of nature connectedness.

Table 6: Means (sd) for nature connectedness across the three time points

	Time 1	Time 2	Time 3
<b>Nature connectedness</b>	6.63 (0.48).	6.43 (1.00)	6.57 (0.69)



A Kruskal-Wallis test was used to examine any differences in nature connectedness between participants at the three time points, however this showed there was no difference in nature connectedness between participants at the 3 time points,  $H(2) = 1.227, p = 0.542, \eta^2 = .005$ .

Pro-nature conservation behavior was also compared across the three groups of participants at the different time points. Scores for pro-nature conservation behavior range from 0-5 with a higher score indicating higher levels of pro-nature conservation behaviours. Table 7 shows the means at the 3 time points

Table 7: Means (sd) for pro nature conservation behaviours across the three time points

	Time 1	Time 2	Time 3
<b>Pro-nature conservation behaviour</b>	3.33 (0.91)	3.42 (1.20)	2.94 (1.11)

Data were analysed using a Kruskal-Wallis test. There was no significant difference in levels of pro-conservation behavior between the three groups of participants at the different time points,  $H(2) = 5.710, p = .058, \eta^2 = .258$ .

## Enjoyment of the visit to Carlton Marshes

Finally, participants were asked to rate how enjoyable they had found their visit to Carlton Marshes. Scores could range from 0-10 with a higher score indicating a greater level of enjoyment. Table 8 shows very high levels of enjoyment at all 3 time points.

Table 8: Enjoyment of visit across the three time points

	Time 1	Time 2	Time 3
<b>How enjoyable was your visit to Carlton Marshes?</b>	8.64 (1.59)	8.63 (2.34)	8.65 (2.29)

## 4. Conclusions

Overall, the findings of this evaluation provide insight into the experience of visitors to Carlton Marshes.

The demographic data shows that the participants completing the evaluation questionnaire were relatively homogeneous, given the predominance of white females taking part in the evaluation, although there was a good spread across ages.

The positive impact of the visitor centre, café and accessible paths comes through very clearly in the open text question which asks about what would help participants to visit more often. The improved accessibility of paths was noted at both time 2 and 3, although some expressed a desire for even more enhanced accessibility, for example, to be able to access the marshes, although there was a recognition that this might be too difficult to put accessible access routes in there.



Participants reported finding it relatively easy to travel to Carlton Marshes, although most did travel by car. A small number of participants travelled by bicycle, on foot or via public transport, although these were in the minority. The positive impact of free parking and access to the site was noted, and the opportunity to make a donation was positively received. This will be particularly important to ensure the reserve remains accessible for people on lower incomes.

Although visitors were generally very pleased with the visitor centre and café, some participants did make suggestions for improvements to the café such as improving the speed of service time, having a wider menu and reducing costs.

The activities provided by SWT were discussed positively, with some participants suggesting they would like more of these both for children/grandchildren, and some asking for more advertising so they know when these are taking place.

The potential to provide some additional signage around the reserve and make suggestions for what to look out for was noted, with one participant going further and suggesting an audio app for mobile phones which could be used to draw attention to points of interest around the site.

External factors were also identified which prevented people from visiting more often, for example, not living closer to the reserve and the weather were both highlighted as issues preventing more frequent visits.

Finally, participants highlighted numerous positive points about Carlton Marshes, the visitor centre, facilities and staff.

## **5. Recommendations**

A number of recommendations can also be drawn from this report.

### ***Broaden the visitor demographic***

Enhancing promotion of Carlton Marshes and Visitor Centre as an inclusive and welcoming environment will be key to helping to broaden the visitor demographic and to increase engagement with the local community.

### ***Maximise social media presence***

Making use of social media to target a wider audience could prove particularly beneficial.

### ***Continue to offer free parking and access to the reserve***

Financial constraints can act as a barrier to participation, so continuing to offer free parking and access will be key to maintaining and growing visitor numbers. The use of a suggested donation was positively received by some participants and should be continued.

### ***Consider increasing activities***

There was positive support for increased activities for both children and adults, along with a suggestion of increased advertising.

### ***Promote pro-nature conservation behaviours***

There is scope for visitors to engage in more pro-nature conservation behaviours, so SWT may wish to consider additional ways in which they might promote activities to support nature conservation.

### ***Review café provision***

Participants made a number of recommendations for how the café might be improved, so engaging in a review process with the customers might help to increase the success of the café.

### ***Improvements to paths and trails***

Some participants suggested that accessibility could be further improved by ensuring smoother drop offs for wheelchairs from the paths/bridges. Whilst there were suggestions for increasing the amount of accessible paths, the impact on wildlife would need to be carefully considered. Communication with visitors to explain why some trails cannot be upgraded may be beneficial.

### ***Signage around the site***

Whilst signage has increased around the reserve, some participants asked for more detail. Therefore, it may be advantageous to consider if signage is adequately meeting visitor needs and add additional signage where needed.

### ***Transport links***

Most participants travelled to Carlton Marshes by car with only a very small number arriving on foot or by bicycle and just 1 person travelling by train. In light of this SWT could consider working with the local authority / local bus company to consider the feasibility of servicing the reserve with public transport and to also consider safe cycling routes to the reserve from local communities.

## 6. References

- Capaldi, C. A., Dopko, R. L. & Zelenski, J. M. (2014) The relationship between nature connectedness and happiness: a meta-analysis. *Front. Psychol.* 5, 976. Doi: 10.3389/fpsyg.2014.00976
- Capaldi, C. A., Passmore, H. A., Nisbet, E. K. Zelenski, J.M. & Dopko, R. L. (2015). Flourishing in nature: a review of the benefits of connecting with nature and its application as a wellbeing intervention. *Int. J. Wellbeing* 5, 1-16. Doi: 10.5502/ijw.v5i4.1
- Howell, A. J., Dopko, R. L., Passmore, H. and Buro, K. (2011). Nature connectedness: Associations with well-being and mindfulness, *Personality and Individual Differences*, 51, 2, 166-171. <https://doi.org/10.1016/j.paid.2011.03.037>.
- Keniger, L. E., Gaston, K. J., Irvine, K. N. & Fuller, R. A. (2013). What are the benefits of interacting with nature? *Int J Environ Res Public Health*. 10(3), 913-35. doi: 10.3390/ijerph10030913.
- Mayer, F. S. and Frantz, C. M. (2004). The connectedness to nature scale: a measure of individuals' feeling in community with nature. *J. Environ. Psychol.* 24, 503-515. Doi: 10.1016/j.envp.2004.10.001
- Nisbet, E.K., Zelenski, J.M. & Murphy, S.A. Happiness is in our Nature: Exploring Nature Relatedness as a Contributor to Subjective Well-Being. *J Happiness Stud* 12, 303–322 (2011). <https://doi.org/10.1007/s10902-010-9197-7>
- Pritchard, A., Richardson, M., Sheffield, D., & McEwan, K. (2019). The relationship between nature connectedness and eudemonic well-being: A meta-analysis. *Journal of Happiness Studies*, 21, 1145-1167 <https://doi.org/10.1007/s10902-019-00118-6>
- Richardson, M., Sheffield, D., Harvey, C. and Petronzi, D. (2015). *The Impact of Children's Connection to Nature. A Report for the Royal Society of the Protection of Birds (RSPB)*. University of Derby and RSPB.
- Richardson, M., Hunt, A., Hinds, J., Bragg, R., Fido, D., Petronzi, D. Barbett, L., Clitherow, T. and White, M. (2019). A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights. *Sustainability*. 11(12), 3250; <https://doi.org/10.3390/su11123250>

## Appendix: Copy of the questionnaire



We would like to find out about your thoughts and feelings about your experience at Carlton Marshes today.

We would like to track your responses to this survey over time. If you are happy for us to do this please create a unique ID code which is comprised of the last 3 letters of your first name and the last 3 digits of your mobile telephone number

Last 3 letters of first name \_\_\_\_\_

Last 3 numbers of mobile phone number \_\_\_\_\_

**It is also helpful for us to know a little information about yourself.**

**Age** \_\_\_\_\_ years)

**Gender** Female [ ] Male [ ] Prefer to self-define [ ] Prefer not to say [ ]

**Ethnicity** White [ ] Black/African/Caribbean/Black British [ ] Asian/Asian British [ ]

Mixed/Multiple ethnic group [ ] Other [ ]

### **Accessibility**

Do you consider yourself to be disabled? Yes [ ] No [ ]

Do you have any mobility problems that might affect your ability to access facilities at Carlton Marshes Nature Reserve? Yes [ ] No [ ]

### **About your visit**

Please answer the following questions as honestly as possible.

Did you visit Carlton Marshes as part of an organised group? Yes [ ] No [ ]

If yes – roughly what was the average age of the group you came with? \_\_\_\_\_

Thinking about who you came here with today, how old were they?

4 and under, 5-10, 11-20, 21-30, 31-40, 41-50, 51-60, 61-70, 70+

Person 1

Person 2

Person 3

Person 4

Person 5

Person 6

What did you do whilst you were here at Carlton Marshes? (Check list – tick all that apply)

- Walked around the trails [ ]
- Walked the dog [ ]
- Bird Watching [ ]
- Visiting the pop-up visitor centre and café (open to end of October 2019) [ ]
- Taking part in an activity organised by Suffolk Wildlife Trust (for example, guided walk, drop in activity, weekend wildlife club, family session) [ ]
- Other [ ] Please expand \_\_\_\_\_

### Accessibility

We would like to find out a little more about how accessible you found your visit to Carlton Marshes. Accessibility can include the physical access to the site, the cost of your visit, if you felt welcome and how easy it was for you to travel to Carlton Marshes.

How easy did you find it to get to Carlton Marshes?      Not at all easy      0   1   2   3   4   5   6   7   8   9   10      Extremely easy

How easy did you find it to get around the site at Carlton Marshes?      Not at all easy      1   2   3   4   5   6   7   8   9   10      Extremely easy

Thinking about what it cost you to visit Carlton Marshes:

How affordable was your visit to Carlton Marshes?      Not at all affordable      0   1   2   3   4   5   6   7   8   9   10      Extremely affordable

We want people from all walks of life to feel welcome at Carlton Marshes.

How welcome did you feel at Carlton Marshes?      Not at all welcome      0   1   2   3   4   5   6   7   8   9   10      Extremely welcome

What would help you to visit Carlton Marshes more often? **(open free text question)**

### Frequency of visits

How often do you visit Carlton Marshes Nature Reserve?

- Most days [ ]      Weekly [ ]      Fortnightly [ ]      Monthly [ ]
- A few times a year [ ]      Annually [ ]      Less than once a year [ ]
- This is my first visit [ ]

## Confidence when visiting Carlton Marshes

How confident do you feel about <b>coming</b> to Carlton Marshes <b>again</b> ?	Not at all confident 0	1	2	3	4	5	6	7	8	9	Extremely confident 10
How confident do you feel about knowing <b>what to do</b> when visiting Carlton Marshes in the future?	Not at all confident 0	1	2	3	4	5	6	7	8	9	Extremely confident 10
How confident do you feel about <b>taking part</b> in one of the <b>organised activities</b> in the future?	Not at all confident 0	1	2	3	4	5	6	7	8	9	Extremely confident 10

## Feelings about nature

The following questions are about you and nature. By nature we mean all types of natural environment and all the plants, and animals living in them. Nature can be close to where you live in towns; the countryside or wilderness areas further away.

Please tell us how much you agree or disagree with the following:

	Strongly disagree	1	2	3	4	5	6	7	Strongly agree
I always find beauty in Nature		1	2	3	4	5	6	7	
I always treat nature with respect		1	2	3	4	5	6	7	
Being in nature makes me very happy		1	2	3	4	5	6	7	
Spending time in nature is very important to me		1	2	3	4	5	6	7	
I find being in nature really amazing		1	2	3	4	5	6	7	
I feel part of nature		1	2	3	4	5	6	7	

## Pro-Nature Conservation Behaviours

Please tell us if you do any of the following activities by ticking the appropriate box.

I put food out to feed garden birds Yes [ ] No [ ]

I move insects if they are in danger Yes [ ] No [ ]

I grow flowers and plants that birds and insects will like Yes [ ] No [ ]

I am a member of a wildlife or nature organisation (e.g., Wildlife Trust, RSPB, WWF etc.)

Yes [ ] No [ ]

I do conservation work away from home (e.g., Wildlife Trust Volunteer etc.) Yes [ ] No [ ]



### Overview of your visit today

Finally, please can you tell us how you rate your experience here at Carlton Marshes today?

Not at all enjoyable	0	1	2	3	4	5	6	7	8	9	Extremely enjoyable	10
----------------------	---	---	---	---	---	---	---	---	---	---	---------------------	----

**Thank you very much for taking the time to complete this survey**