

# Coe Fen and Sheep's Green

## Conservation Plan

### 2001



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## BACKGROUND TO THE CONSERVATION PLANS

The municipal park was a 19th century creation of the British in response to the poor living conditions that resulted from the rapid population growth following the industrial revolution<sup>1</sup>. The Select Committee for Public Walks presented a Report to Parliament in 1833, which concluded that the poorest people living in the worst conditions of overcrowding and poverty in the large cities had the greatest need for parks. The Committee believed that public open space would refresh the air; would improve people's health and provide places for exercise; would be an alternative form of recreation to the tavern; and would provide beneficial contact with nature, so elevating the spirit. Since all members of society would use parks, social tensions would be reduced and the classes would learn from each other<sup>2</sup>. This earliest use was envisaged as informal promenading but parks soon came to include sports such as cricket and football, and then children's play.

The first parks were frequently laid out on whatever land was available, often on the outskirts of towns and cities. However by 1880 it was realised that parks needed to be accessible and sites within the urban areas were favoured. The Town Improvements Act of 1847 allowed local authorities to provide places that could be used for 'resort or recreation'. However it was not until the Recreation Grounds Act of 1859 that provision for active recreation received separate legal acknowledgement<sup>3</sup>. The 1833 Select Committee had placed no emphasis on games or sport but by 1847 there were facilities for boating, cricket, archery, and a gymnasium in some of the newly opened parks, and bowling greens, tennis, and football pitches followed soon after. Active recreation was treated as one among a range of possible uses of public open space and the designs for parks attempted to integrate them into a horticultural setting which frequently shut out the urban surroundings by peripheral tree and shrub planting.

The idea of a park laid out primarily for sports crystallised in the sports parks of Wolverhampton (1880) and Altrincham (1881). Later the formation of the modern Olympic Games provided the impetus for the 1937 Physical Training and Recreation Act giving local authorities the extended powers to acquire land specifically for playing fields. The organizations that have formed during the twentieth century to promote the various sports have subsequently put pressure on parks to provide facilities for their particular interest group.

From 1974, following the Bains Report and the 1972 Local Government Act, the local authority Parks Departments were absorbed into Departments of Leisure and Amenity Services. This consolidated the bias towards active as opposed to passive recreation<sup>4</sup>. It is arguable whether this was a response to the need for reduced expenditure, or actually reflected the aspirations of most users of the majority of public parks. It is suggested that perhaps it was not so much the public interest in sports that had increased, as the effectiveness of the sporting lobby<sup>5</sup>.

Compulsory Competitive Tendering was introduced in the early 1990s as a means of providing the most cost effective maintenance for parks. This meant that staff were no longer a full time presence in a particular park. Under CCT mobile teams moved around various sites carrying out the maintenance work and one of the results of this has been a loss of the informal supervision that was provided and a consequent sense of vulnerability for some park users. The Best Value Review has now replaced CCT and it is assessing the needs of the different users and attempting to produce a balance between their competing requirements. The recent inquiry by the

<sup>1</sup> Hazel Conway 'Parks and people: the social functions', Ed Jan Woudstra and Ken Fieldhouse, *The Regeneration of Public Parks*, E and FN Spon, London, 2000.

<sup>2</sup> Hazel Conway 'Parks and people: the social functions', Ed Jan Woudstra and Ken Fieldhouse, *The Regeneration of Public Parks*, E and FN Spon, London, 2000.

<sup>3</sup> Brent Elliot and Ken Fieldhouse, 'Play and sport', Ed Jan Woudstra and Ken Fieldhouse, *The Regeneration of Public Parks*, E and FN Spon, London, 2000.

<sup>4</sup> Brent Elliot and Ken Fieldhouse, 'Play and sport', Ed Jan Woudstra and Ken Fieldhouse, *The Regeneration of Public Parks*, E and FN Spon, London, 2000.

<sup>5</sup> Brent Elliot, 'From people's parks to green deserts', *Landscape Design*, no 171 (February 1988), 13-15.

Environment Sub-Committee of the Environment, Transport and Regional Affairs Select Committee of the House of Commons has focused political attention on the issues surrounding public parks and their significance, making recommendations about funding and their future management. The Urban White Paper (November 2000)<sup>6</sup> shares the concerns expressed in this enquiry. It goes further than just supporting a halt to the decline, challenging everyone to think more imaginatively about the kind of open spaces that can make a difference to the quality of people's lives in urban settings. It sets out the government's intentions to lead and develop a shared vision for the future of our parks, play areas and open spaces; to improve information on their quality and quantity and on the way in which they are used and maintained. In addition it says the planning and design must be improved as well as the way that existing ones are managed and maintained. The Urban White Paper proposed the setting up of an Urban Green Spaces Taskforce to take this process forward and it will report back in June 2002.

Local authority parks are therefore undergoing something of a reappraisal. A number of issues need to be addressed by today's park managers: the parks' special contribution to the character of an area; the value of the existing facilities; decisions on what provision is required to meet the needs of today's public; the contribution parks can make to urban regeneration and to the biodiversity of urban areas; the need to manage the aging tree stock and fabric of parks; and questions of personal security so that parks can be used by all those who would wish to. As part of this process it is important that there is an awareness of the value placed on the different facilities, features and characteristics of the open spaces by various groups and individuals. The parks' spatial, historical, environmental and ecological qualities and their connection with their surroundings and the memories attached to those places need to be properly understood if changes are to build successfully and appropriately on what has gone before.

Cambridge is fortunate in having developed as a city with large areas of public open space including common land in its centre. The highly managed Parker's Piece, Christ's Pieces and Jesus Green along with the grounds of many of the colleges contrast with the informality of the semi-natural character of Coe Fen and Sheep's Green, parts of the Backs and Midsummer and Stourbridge Commons. These open spaces, public and private, formal and informal create the setting for the urban fabric and the interrelationship between them is fundamental to the character of the city.

This document is one of a series of Conservation Plans which is being written to assess the wide range of qualities these open spaces possess which it is believed should survive into the future. By considering the ways in which these qualities may be vulnerable to change it is possible to produce conservation policies to protect them. It should be emphasised that the plans do not oppose alteration or the evolution of the parks and commons but aim to guide such change in a way that the past and current value of a site is accommodated in any new proposals<sup>7</sup>.

### **Acknowledgement**

Many people have provided useful information for inclusion in these Conservation Plans and made valuable comments during the consultation process. We thank them for their material and for taking the time to read the drafts. We are particularly grateful to the Cambridge Preservation Society which has not only made a financial contribution to the production of the plans but has acted as a partner in their preparation through the efforts of Joyce Baird, Christopher Bradford, Catherine Hall and John Wilkinson. The invaluable assistance of the staff of the Cambridgeshire Collection also deserves our appreciation.

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<sup>6</sup> 'The Urban White Paper: Our towns and cities: the future, delivering an urban renaissance', DETR, (Nov 2000), pp74-76.

<sup>7</sup> David Jacques, 'Memory and value', Edited by Jan Woudstra and Ken Fieldhouse, *The Regeneration of Public Parks*, E and FN Spon, London, 2000.

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## 1. INTRODUCTION TO THE CONSERVATION PLAN

### 1.1 Purpose of the Conservation Plan

- 1.1.1 The enormous development pressure being experienced by Cambridge has led to the need for a series of strategic studies to ensure that the essential character of the city is maintained.
- 1.1.2 At the broadest level is the *Landscape Assessment of Cambridge*, which looks at the geology and topography of Cambridge's environs and defines the different 'character areas' of the city. Although the *Historic Core Appraisal* is principally concerned with the city centre, it builds on the findings of the Landscape Assessment to assess how the city centre sits within its setting and how the different character areas interface with and affect the core area.
- 1.1.3 The Historic Core Appraisal then looks in detail at the city and provides the strategic framework for protecting and improving the core environment. The individual Conservation Plans for the open spaces fit beneath this umbrella document. They will be complemented by similar plans for major buildings such as the colleges, guidelines for the development of key sites, proposals for street enhancement and thematic studies on particular topics such as a 'Street Design Guide'. In this way a logical framework from the broad-brush to the site specific is developed to guide the future of the city.
- 1.1.4 This Conservation Plan for Sheep's Green and Coe Fen has been prepared to provide a basis for their management to safeguard the elements that a wide range of people consider should be conserved for the future. The plan has therefore been circulated to interested parties outside the Council for their comments. The Plan will also assist planning decisions if any development of the surroundings is proposed that might have an impact on these open spaces.
- 1.1.5 The Conservation Plan sets out what needs conserving and why. A management plan will follow which will detail how these objectives will be met. This will propose projects such as tree planting and railings provision or more major changes such as path modifications. Funding for these works can be sought from various bodies outside the City Council. The Heritage Lottery Fund recommends that applications for funding should follow the Conservation Plan process in order to demonstrate that the proposals being put forward do not conflict with the heritage merit of the site. Heritage merit is considered to be those qualities and features that it is desirable to pass on to future generations.

### 1.2 Format of the plan

- 1.2.1 The Conservation Plan provides an analysis of the parks including their history so that the sites can be fully understood by those contemplating making changes to them or their surroundings (*Understanding the site*, section 3). An assessment of the significance of each of their main components follows, to ensure that managers now and in the future are aware of the features that they should try to conserve in their management proposals (*Assessment of significance*, section 4). The defining issues are examined next.

This section considers the issues that have affected the significance of the parks, affect it now or may do so in the future (*Defining issues*, section 5). Guidance is then given on ways to conserve those aspects of significance identified earlier in view of this vulnerability (*Conservation guidance*, section 6). Finally the plan explains how, by whom and when the Conservation Plan will be reviewed (*Implementation and review*, section 7).

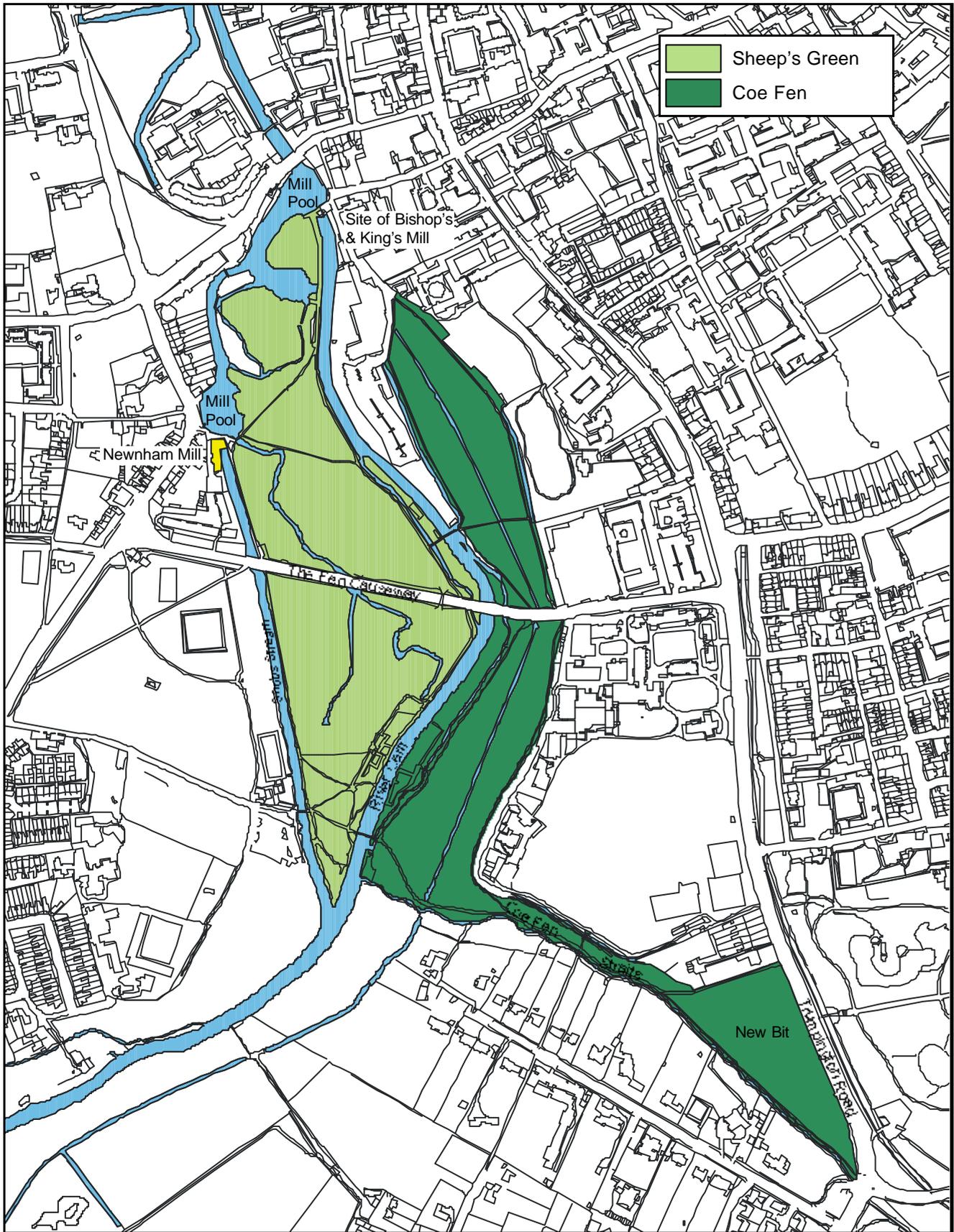
- 1.2.2 There are a number of appendices including a summary table of the conservation guidance for each of the significant elements (appendix 4) and a gazetteer of the main structures and features in the parks (appendix 5).

### **1.3 The site**

- 1.3.1 Sheep's Green, Coe Fen and New Bit measure 6.15ha, 5.2ha and 1.65ha respectively. They lie within the central area of the city in Conservation Area No1, Sheep's Green lies on the west side of the river and Coe Fen on the east. New Bit is the small piece of common adjacent to Trumpington Road, opposite the Botanic Gardens and in this document is considered to be a part of Coe Fen, linked to the remainder by Coe Fen Straits (fig 1).

### **1.4 The Conservation Plan**

- 1.4.1 The Plan has been prepared by the Environment and Planning, and Community Services Departments in partnership with the Cambridge Preservation Society.
- 1.4.2 The Plan has been prepared taking account of:  
*Cambridge City Council's Leisure Strategy for 1996-2000*. Relevant policies are: SR6 96; SR14 96; SR15 96; SR22 96.
- 1.4.3 *The City Wide Arboricultural Strategy 1996*, Cambridge City Council, pp 7-11.
- 1.4.4 *The Cambridge Local Plan 1990*, chapter 4 *The Natural Environment* and chapter 8 *Recreation and Leisure*.
- 1.4.5 *The Parks, Shelterbelts and Open Spaces Local Habitat Action Plan*, and the *'Urban Forest Local Habitat Action Plan*.
- 1.4.6 *The Cambridge Landscape Appraisal, 2000*, Cambridge City Council.



**Fig.1** Sheep's Green and Coe Fen

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The King's and Bishop's Mills c.1927 before their demolition

*By courtesy of the Cambridgeshire Collection*

## 2. UNDERSTANDING THE SITE

*This section of the Conservation Plan gives a comprehensive description of Sheep's Green and Coe Fen so that those making management decisions on one aspect can have an understanding of the site as a whole.*

### 2.1 Historical Development

- 2.1.1 The Domesday survey in 1086 records that there were three mills in this part of Cambridge, although one may have been further downstream. The King's Mill and Newnham Mill are known to have existed before the Norman Conquest. It is not known whether the Bishop's Mill, situated beside the King's Mill on the east side of the river, was this third mill, or one of three said to have been built by Picot, William the Conqueror's sheriff of Cambridge but it was certainly also early (fig 1). At least 1000 years ago this part of the riverside pasture was modified by confining the river into the embanked channel of the main river and the smaller Snobs Stream to provide the power for the King's and Newnham Mills. The ancient original meandering streams can still be seen on Sheep's Green, particularly in wet weather giving some idea of the earlier patterns of seasonally flooded ground. The ground on Coe Fen was raised at the beginning of the 20th century by dumping rubbish to bring surrounding levels up to that of the main river on its east side<sup>8</sup>, partly burying the watergate in the Peterhouse perimeter wall. Fig 2 is a series of maps showing the main developments that have taken place since 1574.
- 2.1.2 The mills were essential to the economy and development of Cambridge. It was a shire town in a royal shire and the king controlled mills and milling through his officials. The principal mill retained its name the King's Mill, but with the emergence of the mayor and commonalty as a chartered corporation, control passed to them and was exercised through the miller, their nominee and tenant. From quite an early date the Bishop's Mill was actually worked by the corporation miller, the bishop receiving an annual fixed payment. The Bishop's Mill was relegated to less profitable coarse milling of bran, oats and ingredients for 'horse bread', while the profitable milling was concentrated at the King's Mill<sup>9</sup>.
- 2.1.3 Only the Newnham Mill survives at 2001. This closed for milling in 1910 and has subsequently been converted into a restaurant. These corn mills marked the river's head of navigation and barges made their way along the Backs to them and to Beales coal and corn yard on the corner of Newnham Road where Darwin College now stands. From the 11th to the mid 14th century commercial activity was concentrated on a series of quays along the east bank upstream from the Great Bridge, reached by small lanes running from the High Street (now St John's Street, Trinity Street and Kings Parade). The changing patterns of trade from almost totally agricultural produce to more sophisticated goods had already put this area into partial decline by the time of the arrival of the royal colleges in the mid 15th century<sup>10</sup>. The river trade continued to decline as the road transport system improved, culminating eventually in the arrival of the railway in 1845. However barges still continued to bring grain to the King's Mill during the last years of the 19th century<sup>11</sup>.

<sup>8</sup> *Cambridge Chronicle*, November 1915.

<sup>9</sup> Catherine Hall Pers Com.

<sup>10</sup> Catherine Hall Pers Com.

<sup>11</sup> Gwen Raverat, *Period Piece, A Cambridge Childhood*, p.33, Faber and Faber 1952.

- 2.1.4 The low lying ground between the artificially raised banks of the main river and Snob's Stream would have been very prone to flooding and therefore only suitable for grazing. There were islands of drier land however and these had longer grazing seasons or were able to be used as gardens or orchards. They were mostly enclosed at an early date and have subsequently fallen into private ownership, Laundress Green being an exception. Darwin Island or possibly Nutter's Close may have been the island where the hermit who maintained the Small Bridge grew his cabbages and leeks. The site of the Garden House Hotel is on land enclosed for the use of the miller of the King's Mill and his horses. A similar miller's house and close at Newnham can also be traced. The name Coe (cow) Fen probably originated from the fact that cattle and horses could be pastured on ground that had been trampled by heavy hooves, while sheep needing the drier ground could be confined within hurdles on those parts of Sheep's Green that afforded these conditions.
- 2.1.5 Two bridges, known as the 'Small Bridges', were needed to cross the river to reach the rest of the town from Newnham. These were the first mentioned in 1396 when the Bishop of Ely granted an indulgence to all who contributed to their repair and worshipped in the bridge chapel<sup>12</sup>. They are clearly shown on the Hammond map (1592) which due to its poor condition is difficult to reproduce clearly. Until the Reformation in the 16th century the bridges were kept in repair by a succession of hermits who were allowed to take tolls to pay for the upkeep. Until 1756 the smaller of the two bridges spanned the stream that ran from the Cam over to Queen's Green, now known as Queen's Ditch. The other timber bridge which extended over the main river was replaced eventually by a cast iron one in 1841. The present bridge designed by Sir Edwin Lutyens in 1932 was opened in 1959. The broad paved area on the south side was included so that the east end of Silver Street could be widened at some time in the future<sup>13</sup>.
- 2.1.6 The King's Ditch was the name given to the defensive ditches encircling the upper and lower town and particularly to the ditch shown on Richard Lyne's map of 1574. It possibly dates originally from late pre-Norman Conquest times, having been recut in 1265 when it was last seen as having a defensive role. It then served as an increasingly ineffective open sewer until it silted up completely. The Ditch branched from the Cam at the Mill Pond and ran along the north side of Mill Lane, circled around the south and east of the old town, joining back into the river at Magdalene College.
- 2.1.7 New Bit was at one time partly arable towards the Trumpington Road but was reclaimed for common grazing after the loss of other areas. Together with the Leys (before the expansion of the school in the house of that name over the whole of the close) this area was of particular importance to the small dairies that sprang up in New Town to cater for the demand for fresh milk. The cows, crossing between their milking sheds and grazing ground, used the small iron bridges over Hobson's Conduit, dated 1851.

<sup>12</sup> Cooper, *Annals*, I 143

<sup>13</sup> Margaret Keynes, *A House by the River*, 1984.

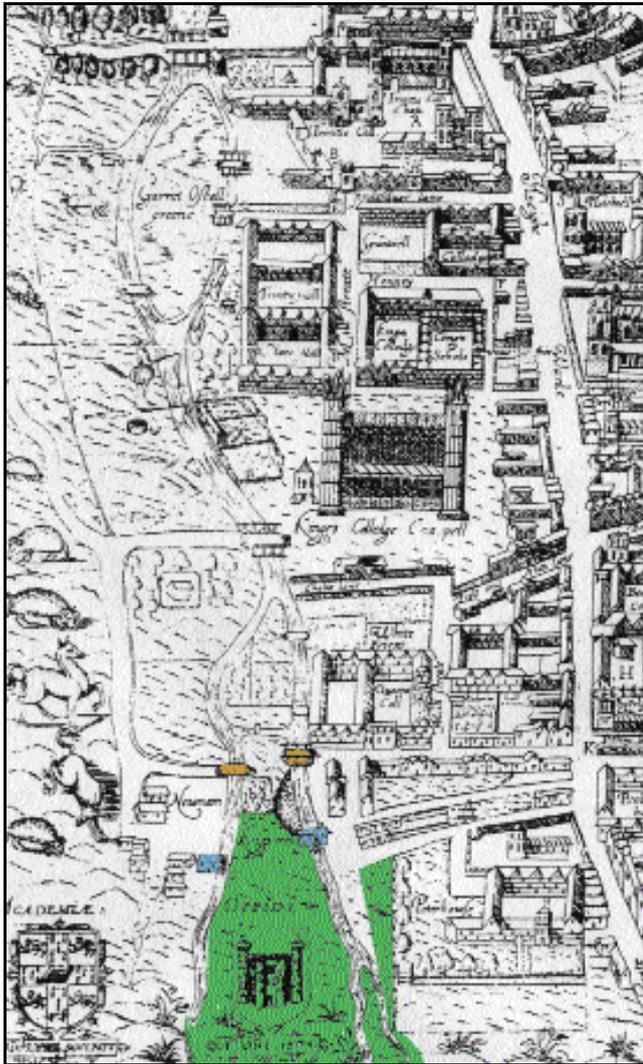
- 2.1.8 By the early 19th century the state of the commons in Cambridge was giving rise to increasing concern. Evidence given by Mr Beales to the Commission for enquiring into the existing state of Municipal Corporations in England and Wales set up in 1833, creates a vivid picture of the conditions at the time '*...that Coe Fen was till lately so bad that the mire came up to the horses' knees. That he saw one horse dragged out. That the medical men considered, that if it were not drained it would be fatal to the health of the town. That it has been recently drained by subscription, at the expense of £150, to which the Corporation after two or three years delay liberally contributed £10. That the drainage has immensely improved it. That its value to let, is increased from two shillings and sixpence to £10 per acre... That Sheep's Green is in a very bad state during the winter and wants draining. That the sluice gates and waste gates of the mills are not wide enough.*'<sup>14</sup>
- 2.1.9 A number of attempts were made between 1841 and 1876 to resolve the overuse of the Cambridge commons by those who had no legal rights to them. It was too difficult to trace the true holders and various plans were put forward to release land for building or allotment gardens. Other parts of the commons suitable only for pasture were to be divided up and rented out. In 1870 the Council considered a report recommending a proposal to build 20 houses with gardens on an area of Coe Fen. Laundress Green and Sheep's Green were to 'be improved and placed under proper regulations'<sup>15</sup>. There was fierce opposition to this enclosure from the public. Little progress was made to resolve matters until the 1876 Commons Act made it possible for the Council to apply to the Enclosure Commissioners for an order to regulate the commons rather than to enclose them. Changes in land management were therefore eventually brought about by the introduction of byelaws in 1878.

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<sup>14</sup> C H Cooper *Annals of Cambridge* 1842-1908.

<sup>15</sup> Syme A, *Coe Fen and Sheep's Green: a historical and ecological study of two Cambridge Commons*, 1986. p6. Cambridgeshire Collection.

**Fig.2** A series of maps showing the main changes that have taken place on Sheep's Green and Coe Fen between 1574 and 2000.



**1574 LYNE**

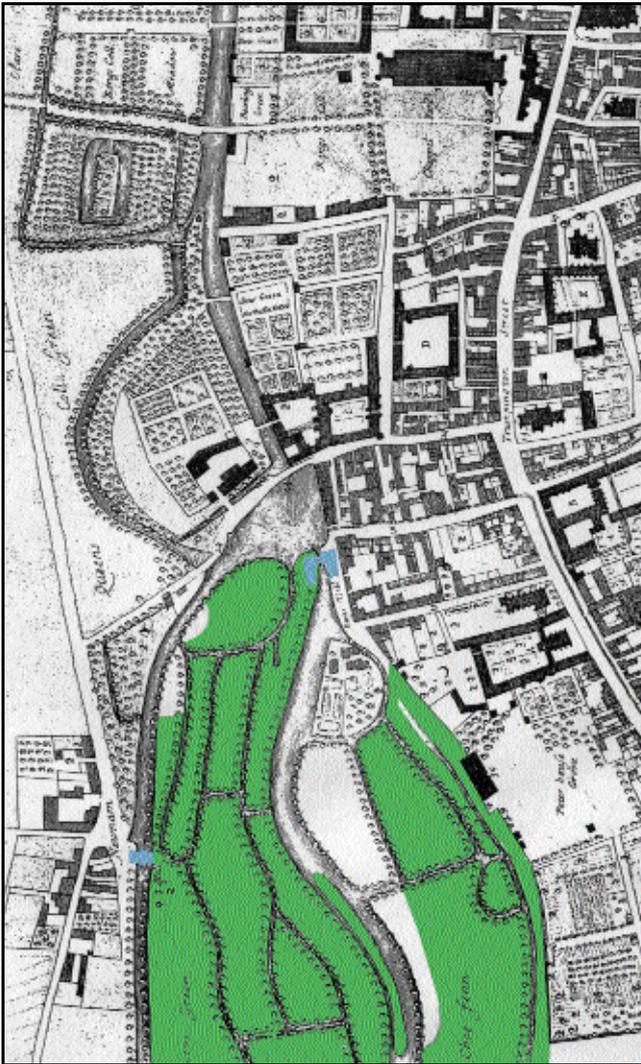
- The approximate extent of Sheep's Green and Coe Fen in 2001.
- The 'Small Bridges'.
- The Newnham Mill and the King's and Bishops' Mills together.



**1592 HAMMOND**

- The approximate extent of Sheep's Green and Coe Fen in 2001.
- The 'Small Bridges'.
- The Newnham, King's and Bishop's Mills.

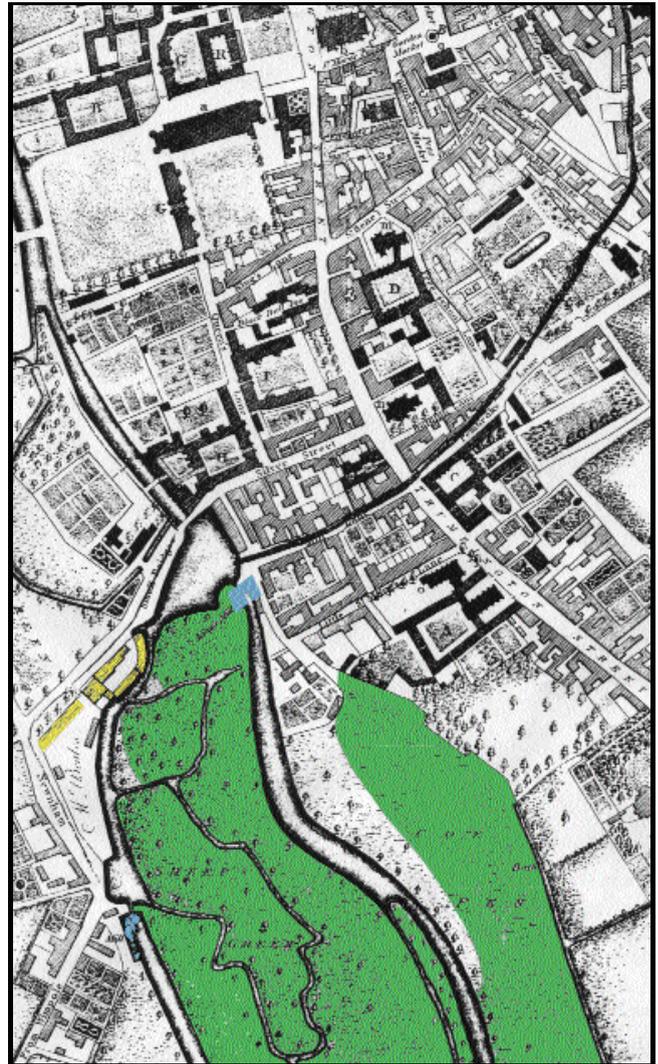
The adjacent section of map is in too poor a condition to reproduce. The spectaculum can be seen but no ditch leading to it. Trees line every ditch.



1688 LOGGAN

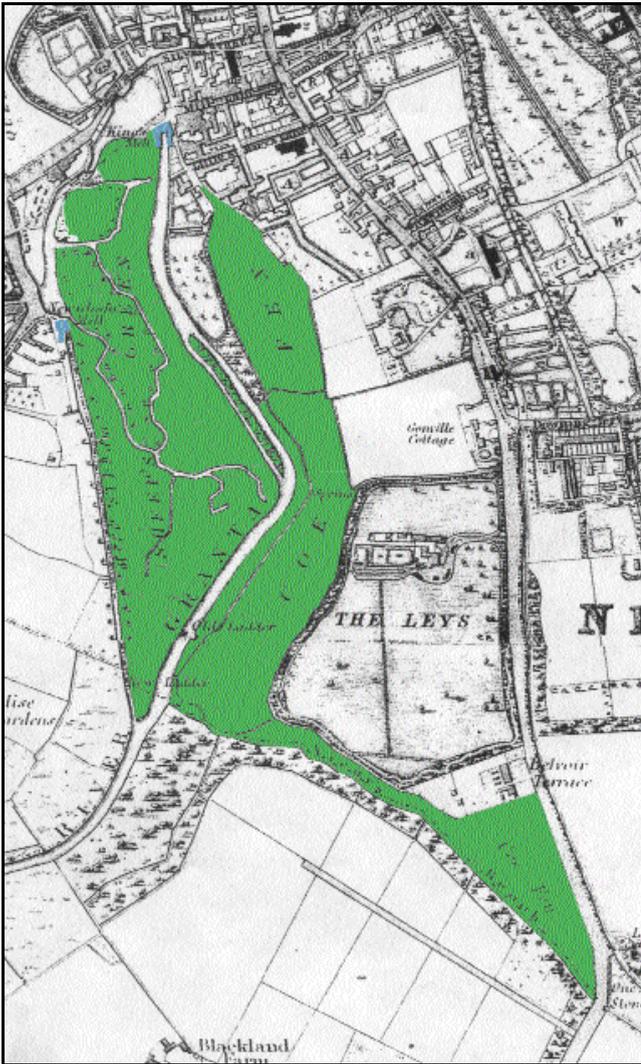
- The approximate extent of the north end of Sheep's Green and Coe Fen in 2001.
- The Newnham, King's and Bishop's Mills.

Extensive tree planting along the ditches can be seen.



1798 CUSTANCE

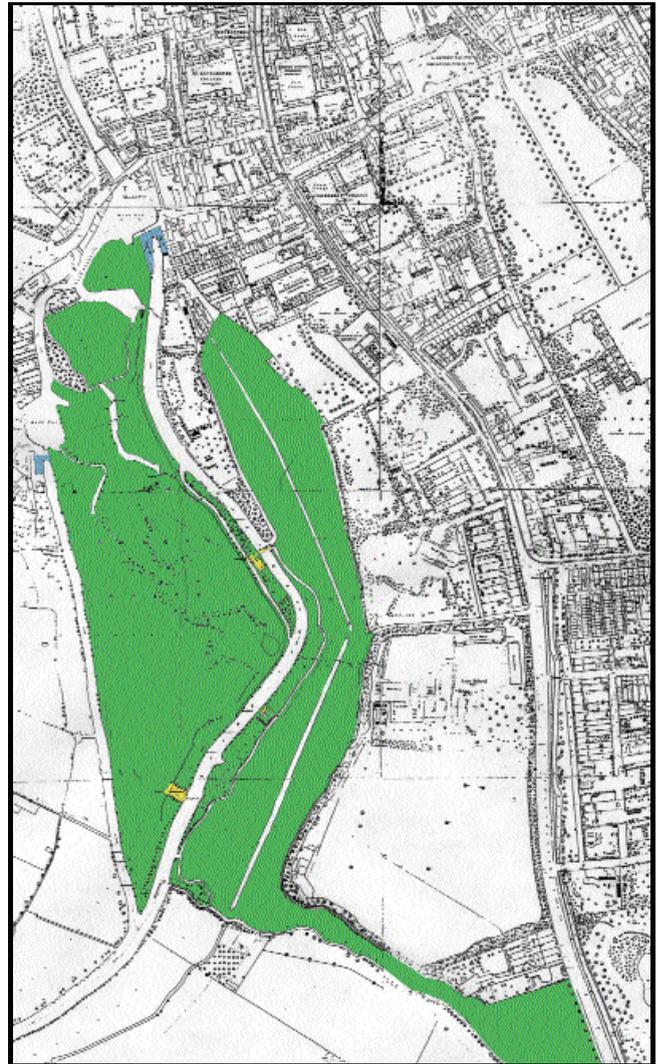
- The approximate extent of the north end of Sheep's Green and Coe Fen in 2001.
- The Newnham, King's and Bishop's Mills.
- The Hermitage, Patrick Beales' house at Newnham (later known as Newnham Grange) and the granaries have been built and all later were to form part of Darwin College. One of the two 'Small Bridges' was removed in 1756.



1830 BAKER

■ The Newnham, King's and Bishop's Mills.

'New and Old Ladder' represent the bathing places at the south end of Sheep's Green.

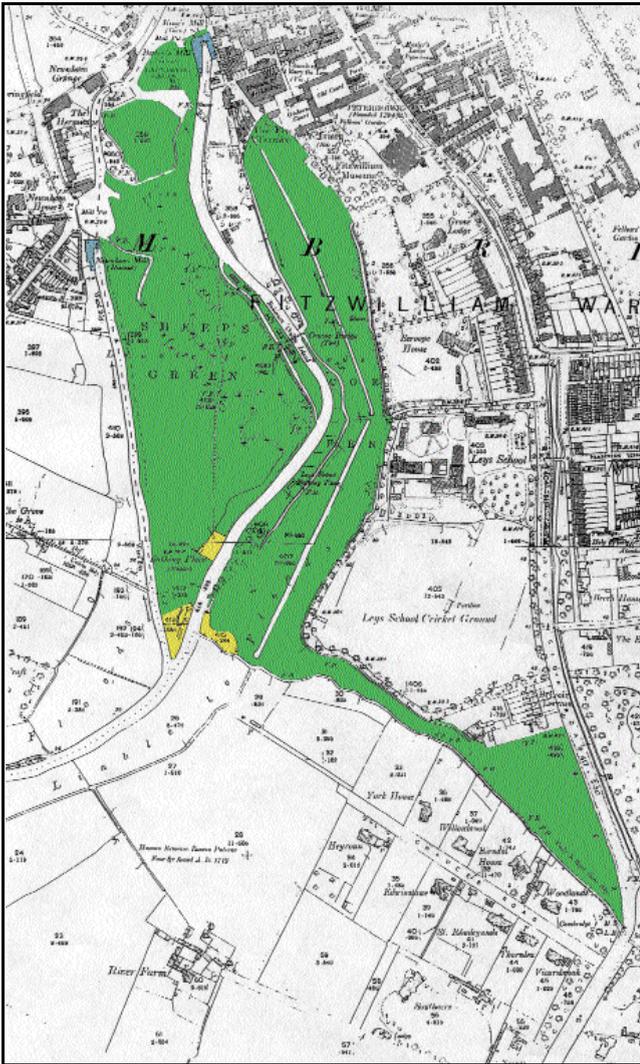


1886 ORDNANCE SURVEY

■ The Mills.

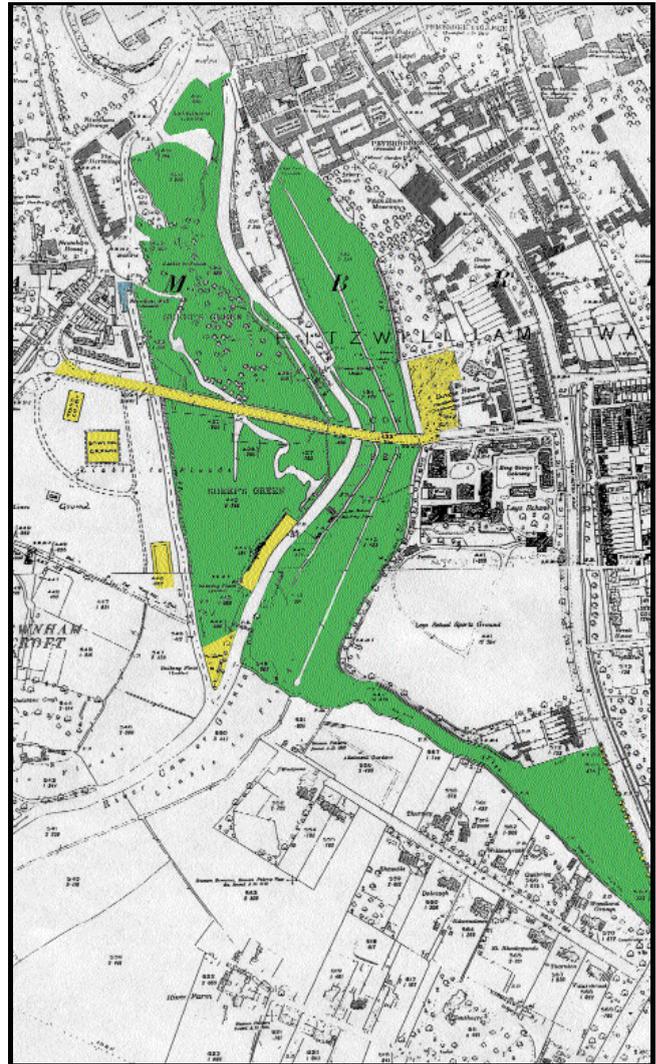
■ A house on Robinson Crusoe Island, the Leys School and Men's bathing places.

A cast iron bridge replaced the remaining wooden 'Small Bridge' in 1841. The Ley's House has become the Leys School buildings and the school has set up its own bathing place on the east side of the river. A central ditch has been dug in the made up land on Coe Fen to carry the water draining the farmland to the south. A footpath to the men's bathing place is shown. George Darwin and his wife Maud moved into Newnham Grange in 1885.



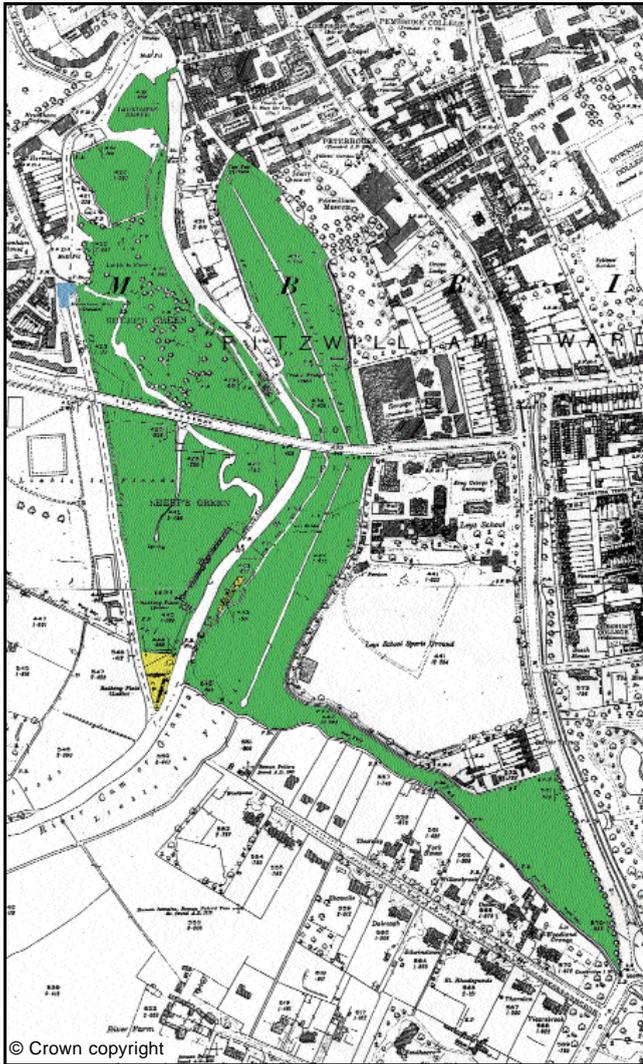
1903 ORDNANCE SURVEY

- Newnham Mill and the now disused King's and Bishop's Mills.
- The Robinson Crusoe footbridge links Sheep's Green with Coe Fen. The tree cover appears to have diminished. Housing has been built along Chaucer Road south of Coe Fen Straits and New Bit. Hodson has built his pavilion and enclosed a small piece of garden so that he can supervise his daughters bathing at the ladies bathing place in Snobs Stream.



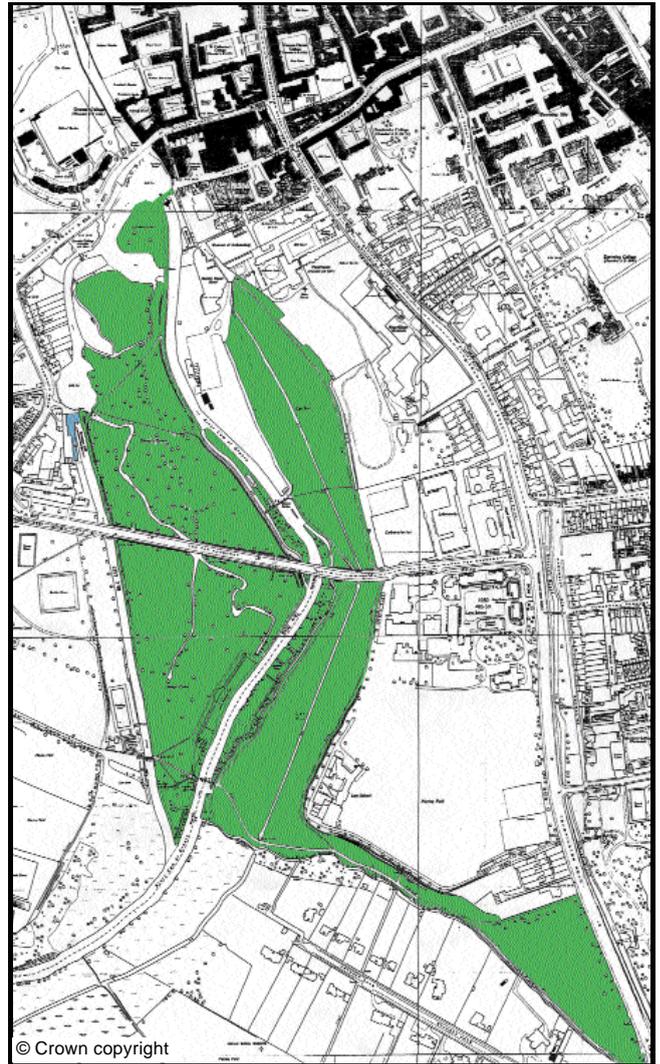
1927 ORDNANCE SURVEY

- The Newnham Mill closed in 1910, the King's and Bishop's Mills have been demolished.
- A footbridge linking the south ends of Sheep's Green and Coe Fen was opened in 1910 to replace the chain ferry taking ladies over to the bathing place on Sheep's Green. Changing rooms have been built for the mens' bathing places and those for the ladies extended. A more extensive network of footpaths has developed following the increased house building to the south. A row of horse chestnuts has been planted along the Trumpington Road side of New Bit. The west end of Brooklands Avenue was connected to Trumpington Road in 1923. The new University Engineering Department laboratories overlook Coe Fen. Lamas Land to the west of Sheep's Green has been developed as a recreation ground with a children's paddling pool, bowling green and tennis courts. Fen Causeway was opened in 1926 to ease traffic congestion on Silver Street Bridge.



1951 ORDNANCE SURVEY

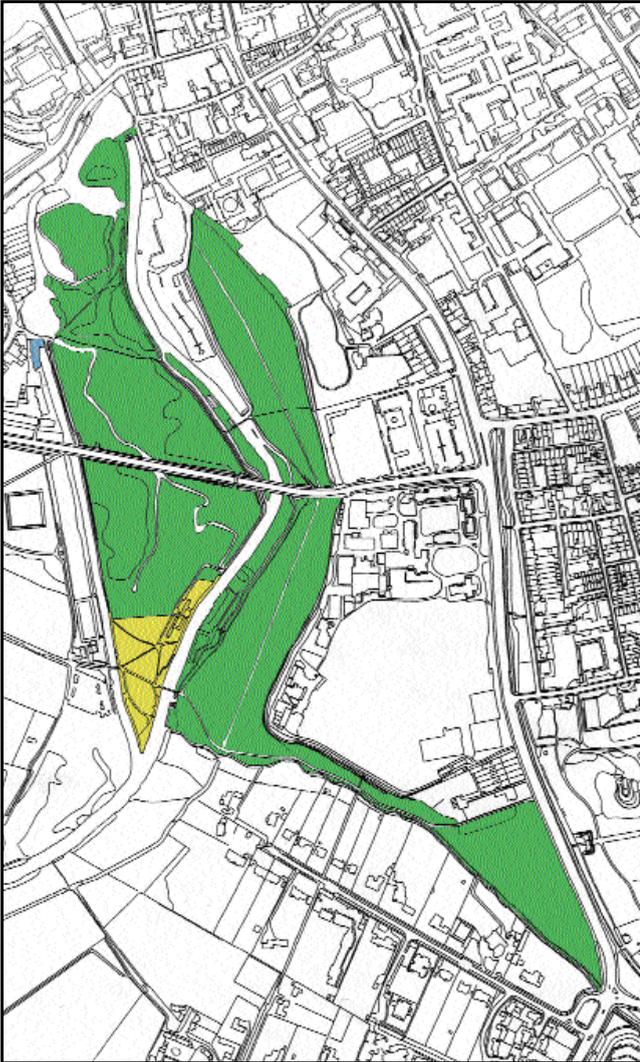
- The Newnham Mill.
- Huts constructed during the Second World War remain on the west side of Coe Fen opposite the bathing places. The ladies bathing place has been extended.



1967 ORDNANCE SURVEY

- The Newnham Mill.

A bridge designed by Sir Edwin Lutyens in 1959 replaced the cast iron bridge in Silver Street. Extensive tree planting has been carried out on Sheep's Green. The Darwin Family moved from Cambridge and their former homes were transformed into Darwin College in 1963. A picnic area replaced the ladies bathing place in 1966 as the men's was converted to mixed bathing. The wartime huts have been demolished and an inner row of horse chestnut trees has been planted on New Bit to replace the declining line planted between 1903 and 1927.



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#### 2000 ORDNANCE SURVEY

- The Newnham Mill.
- The Sheep's Green Learner Pool has replaced the river bathing places and the map now shows the picnic area (1972).

- 2.1.10 Sheep's Green and Coe Fen have escaped development proposals on more than one occasion. There were various schemes to take the railway right up to the mills on Sheep's Green. At different times plans were made to put stations on both Coe Fen and Sheep's Green. However much opposition from the townspeople, the river traders and the powerful influence of the University prevented the railway gaining permission to acquire access to such a central location and once again these commons survived intact.
- 2.1.11 In 1912 there was a proposal to connect Newnham with Trumpington Street by building a bridge over the millpool from Silver Street. This was to create two branch roads, one to Mill Lane and the other to cross the river passing behind the Garden House Hotel and across Coe Fen near the Peterhouse boundary wall, down Coe Fen Lane, to link with Trumpington Road. It was anticipated that the area would be enhanced by the erection of a suitable block of buildings on the site of the King's Mill. However this was another scheme that failed to be implemented<sup>16</sup>.
- 2.1.12 Finally however Newnham and Trumpington Road were linked by the building of Fen Causeway in 1926. There was opposition to the project as it was seen as a great intrusion to this peaceful place rich with wildlife. However it created valuable work at a time of high unemployment and provided an alternative route into the city centre easing congestion on Silver Street Bridge.
- 2.1.13 The lack of realistic alternative uses for the wet land of Sheep's Green and Coe Fen has helped to retain their essential character over the years. Nutter's Close (or Foster's Close) is the name of the piece of pastureland attached to the old King's and Bishop's Mills. This was the last piece of Lammas land left in Cambridge. Its grazing rights were extinguished in 1951 when the Corporation gave Sir Charles Darwin the freehold of the Little Island and kitchen garden, where the Darwin College Study Centre now stands, in exchange for the freehold of Nutter's Close, with the result that it is now part of Sheep's Green. The adjacent Laundress Green was so called because washing from the nearby colleges was dried here.
- 2.1.14 It was not until 1893 that an organised sewage system was provided for the whole town and until then the river had been badly polluted. Gwen Raverat, another grandchild of Charles Darwin the evolutionist, was brought up in Newnham Grange overlooking Laundress Green. She writes of her childhood and explains why the public bathing places were situated upstream of the town in the clean water. She gives an evocative picture of the river in her description of an outing in the late years of the 19th century as a child in a family party rowing up the river towards Grantchester for a picnic.

*'All summer Sheep's Green and Coe Fen were pink with boys, as naked as God made them; for bathing drawers did not exist then; or at least not on Sheep's Green. You could see the pinkness dancing about, quite plain from the end of our Big Island. Now to go Up the*

<sup>16</sup> Syme A, p6

*River, the goal of all the best picnics, the boats had to go right by the bathing places, which lay on both sides of the narrow stream. These dangerous straits were taken in silence, and at full speed. The gentlemen were set to the oars - in this context one obviously thinks of them as Gentlemen - and each lady unfurled a parasol, and, like an ostrich, buried her head in it, and gazed earnestly into its silky depths until the crisis was past, and the river was decent again..... I - but not Charles, which was so unfair - was given a parasol, and told to put it up, and not to look 'because it was horrid' . I obediently put up the parasol and carefully arranged it so that I could see comfortably, without hurting their feelings. For I thought the bathing places one of the most beautiful sights in the world: the thin naked boys dancing about in the sunlight on the bright green grass; the splashing, sparkling river; the reckless high dives, when the slim bodies shot down through the air like angels coming from heaven; it was splendid, glorious, noble; it wasn't horrid at all. It was the ladies that were horrid; but then poor things, they always were even stupider than most other grown-ups.'*<sup>17</sup>

- 2.1.15 Sir George Darwin, Gwen Raverat's father, in 1887 successfully opposed the proposal to build ladies bathing sheds (changing rooms) on Laundress Green. They were sited instead a few years later on the west side of Sheep's Green, on the upper part of Snobs Stream near where it leaves the main river channel to supply the Newnham Mill. There were grass lawns and willow trees and the backs of the sheds provided the necessary privacy. It was not considered suitable to reach them via the footpath on Sheep's Green that passed by the men's bathing places so instead a chain ferry took the ladies over the river from Coe Fen. A footbridge replaced this in 1910. After the First World War mixed bathing became more acceptable and presumably swimwear more available. Strong swimmers of both sexes were allowed to use the main river. By 1972 an outdoor pool for learners had been built and the ladies area became a place for picnics.
- 2.1.16 The Darwin family connections with Sheep's Green and this part of Cambridge are also described in Margaret Keynes' book *A House by the River*. The author was another granddaughter of Charles Darwin. The book documents the transition from a coal and corn yard into residential accommodation and gardens, and explains how these provided the site and original buildings for Darwin College founded in 1963, following the death of her brother Charles.
- 2.1.17 Despite being grazed by cattle and used as a soldiers' billet during the First World War, Coe Fen has been used in the past for hockey and golf and although no formal games are played in 2001, Sheep's Green and Coe Fen still have an important informal recreational role. In the past these commons have been defended from development by the local people and there seems never to have been any pressure to change their character from grazing common and ornament them in a formal way. It is interesting that the adjacent University Botanic Garden has also managed much of its grassland as meadow for approximately the last hundred years.

<sup>17</sup> Gwen Raverat, *Period Piece, A Cambridge Childhood*, p110, Faber and Faber 1952.

## 2.2 Design structure and townscape role

Figure 3 is a location plan while figure 4 shows the main elements that define the character of Sheep's Green and Coe Fen.

2.2.1 Sheep's Green and Coe Fen are separated by the main channel of the River Cam. They are semi-natural open spaces grazed by cattle, horses and geese and their informal character is directly responsible for bringing a sense of countryside into the heart of the city. In spring and early summer the flowering meadows are spectacular. Sheep's Green is crossed by a number of old river channels some of which only hold water during a wet season. The two millponds form a visual focus and a setting for the surrounding buildings. The trees are largely maiden and pollard willows, and white and Lombardy poplars. A distinctive characteristic of Sheep's Green is the vertical habit of the Lombardy poplars. An impression of significant tree cover is created with little shading of the ground. In contrast Coe Fen and New Bit are essentially open areas with trees confined to the edges. The angularity of the Garden House Hotel with its manicured grounds, contrasts dramatically with the informality of the surrounding landscape. A number of footpaths cross the commons and two iron footbridges connect them over the main river. These allow people to follow practical and enjoyable pedestrian routes between the city centre and the housing in Newnham and around the Trumpington Road area.

2.2.2 Trees and hedges, on site and on the surrounding land, largely provide the sense of enclosure that is so important to the character of these open spaces. Peterhouse wall built at the beginning of the 16th century creates the impression of a walled town, so sharp is the contrast with the fen. Buildings such as the University Engineering Department, the Leys School and its Leyland cypress hedge, and the Garden House Hotel intrude unsympathetically along the boundary. Other buildings such as the Newnham Mill, the Granta Inn, Newnham Grange and particularly the Old Granaries, Peterhouse Wall, the Fitzwilliam Museum and Belvoir Terrace have a much more positive relationship with the commons. They provide focal points to views and a link with the urban context beyond the open space. It would be impossible to achieve a completely encircling screen of vegetation, and these latter examples show that it would not necessarily be desirable. The skyline is another important component of this enclosure and glimpses of King's College Chapel, Peterhouse College and the town's church towers are an important part of the views to the north and northeast. This relationship between the built form and the semi-natural spaces of Sheep's Green and Coe Fen form the transition from the wider countryside around Grantchester to the more highly managed grounds of the Backs and Colleges.



FIG 3

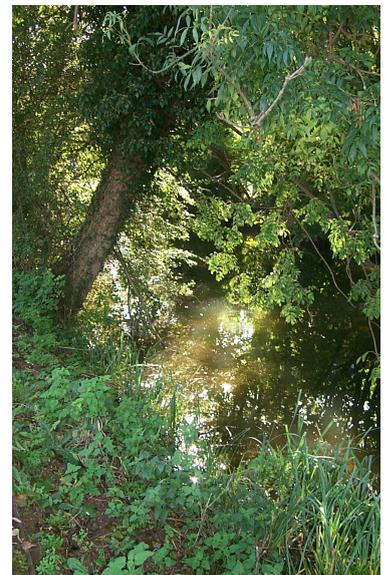
FIG 4

- 2.2.3 Views into the commons from the surrounding streets make a valuable contribution to these surrounding areas. The narrow Mill Lane terminates at the Mill Pool amongst the activity of punt hire businesses and people walking purposefully between the city centre and home while others gather to enjoy the sunshine beside the weir and on Laundry Green. Tourists on Silver Street Bridge have an elevated view of the Mill Pool and the meadows beyond, in contrast with the more formal grounds of the colleges to the north. Travellers passing by on the Newnham Road get fleeting glimpses of Sheep's Green and the second millpool by the Granta Inn, while those on the Trumpington Road have views on to New Bit between the horse chestnut trees. Fen Causeway bisects both Sheep's Green and Coe Fen on a raised embankment just as the name suggests. In early summer hundreds of people each day witness the sight of cattle and horses grazing a flower filled meadow as they pass along the road. There cannot be many cities where such a sight can be enjoyed just minutes from its centre.



## 2.3 Recreational facilities

- 2.3.1 The diary of Alderman Samuel Newton records that in 1680 a sturgeon nearly two yards long was caught in the Bishop's Mill Pool. Nothing to match this has been seen in recent years but angling is a popular pastime and Snobs Stream with its marginal vegetation is a particularly good habitat. The main river channel and the two millponds are used extensively for punting. These activities provide interest and a human presence for those enjoying sitting on one of the many seats, making the commons more than just places people pass through on their way to somewhere else. The combination of areas of water, natural vegetation and grazing animals provides a sense of calm that contrasts with the adjacent urban activity.
- 2.3.2 Laundry Green at the north end of Sheep's Green is a natural gathering point for students, tourists and workers enjoying a lunch break in summer. It also provides an ideal outdoor area for the patrons of the nearby pubs on long summer evenings. This heavy use means the less resilient weed species in the grass do not survive and the grass is good for sitting on. The cows do graze the finer grasses of the area but generally in the early morning before the crowds arrive.
- 2.3.3 There are no formal recreational uses of these open spaces today. An area of regularly mown grass at the southern end of Sheep's Green near the swimming pool provides a picnic site, contrasting with the rough grazing elsewhere and providing an area that is free from the cattle and horses. The learner pool is a small open-air swimming pool, with adjacent storage sheds that are used by the Cambridge Canoe Club. The tradition of swimming in this part of the river continues despite byelaws prohibiting it between 8am and 9pm in June, July and August and 8am and 8pm the rest of the year. Rope swings appear from time to time attached to riverside trees and young people have much enjoyment jumping into the water. This age group seems less concerned about water quality or the hazards of what might lie below the water surface. Punting only became an established pastime at Cambridge in Edwardian times because it was mistakenly believed that the riverbed was too muddy. Before that people had used rowing boats and Canadian canoes.



- 2.3.4 The numerous bridges over the river and ditches make it easy for people to use the commons as a short cut and enable them to avoid the traffic filled streets on their way to and from the city centre and east-west across the Fen. The pleasant environment turns an essential journey into a recreational experience.

## 2.4 Structures and artefacts

- 2.4.1 The old buttressed stone wall built in 1501-2<sup>18</sup> at Peterhouse forms the eastern boundary of Coe Fen. It has received many repairs over the years and is a patchwork of materials today. These repairs have destroyed any trace of the Spectaculum built in 1544-5 against the fen wall with the water gate inside it<sup>19</sup>. This little lookout building was paved with steps up to the level of the fen wall and the Hammond map of 1592 shows it clearly. This would have allowed the view over Coe Fen and Sheep's Green to be enjoyed. The ditch that runs along the east side of Coe Fen just south of the wall is the remains of a medieval ditch which originally kept grazing beasts out of the adjacent crofts to the east of it. It was later connected to Hobson's Conduit for a time and supplied a Bath in the Peterhouse Scholars' Garden.
- 2.4.2 There are a number of simple timber bridges with white painted hand rails on the Fen. These carry the footpaths over the meandering branches of the original river course on Sheep's Green and the central ditch on Coe Fen. There are also smaller less obtrusive bridges over the smaller ditches. The two iron bridges over the main river are important links between Coe Fen and Sheep's Green. They are the most conspicuous artefacts and have a pleasing simplicity in their construction and colour scheme. The bridges supporting Fen Causeway over the river and Snobs Stream are being strengthened during 2000-2001.

## 2.5 Infrastructure

- 2.5.1 A number of routes are classified as definitive footpaths (appendix 1). A variety of surfacing materials are used ranging from hoggin to asphalt. Some of the paths take a considerable amount of cycle as well as pedestrian traffic. The path from Trumpington Road alongside Vicar's Brook is a suggested cycle route along the west side of the main river, in addition to the one along the east side of Coe Fen, linking the outskirts of the city with the centre.
- 2.5.2 There are power supplies to the Scudamore boat repair sheds on Robin Hood Island and the Canoe Club building next to the Learner Pool. These originate from Fen Causeway and run north and south via the cattle underpass.
- 2.5.3 There is a foul sewer at a depth of approximately 1.8m, running from the Fen Causeway roundabout, across Sheep's Green and Coe Fen in a west-east direction. Water from the paddling pool is discharged at the end of the season into the side branch of the old river course. There may be a spring associated with this depression but water could not be said to flow down it, more that the ground remains damp.

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<sup>18</sup> Willis and Clark, *Architectural History of the University of Cambridge*, 1886.

<sup>19</sup> Philip Pattenden *Garden Steward, the College Gardens, Peterhouse*, p44. 1986.

- 2.5.4 The cattle underpass allows the cattle to move freely between the north and south parts of Sheep's Green. It is intended to extend this facility to cyclists and pedestrians by summer 2002 when the underpass will be upgraded as part of the other bridge strengthening work. It will remove the need to cross Fen Causeway at the surface for those people who want to walk along the west side of the main river channel. Steps will be taken to prevent the cattle congregating in the tunnel.

## 2.6 Trees

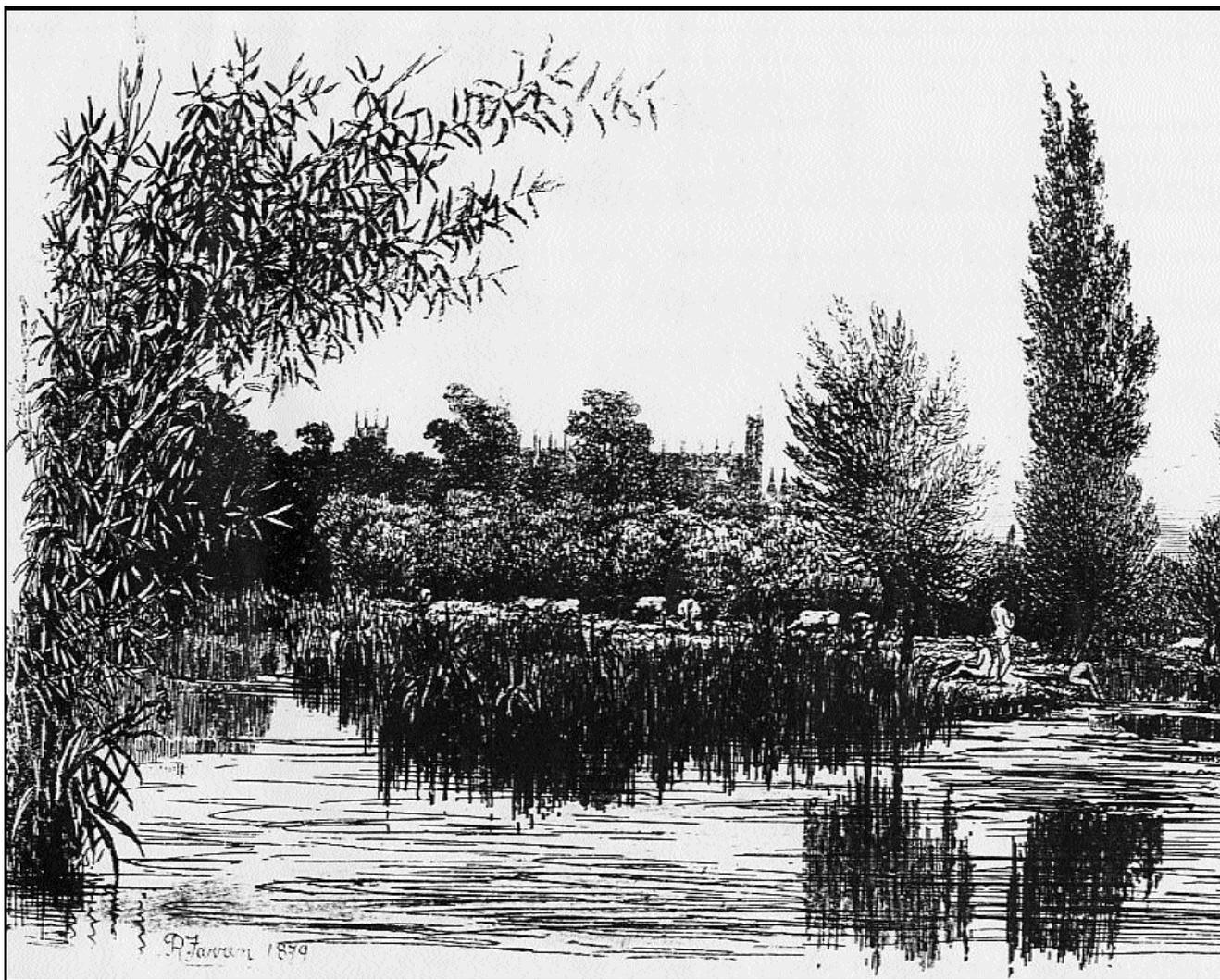
- 2.6.1 The old Field Books in which the tithes were recorded referred to the low lying ground between Newnham and what is now known as the Backs as 'Thousand Willows'<sup>20</sup>. The old maps clearly show trees planted along the river and smaller water channels and ditches. Hammond's Map of 1592 shows woods or plantations around Nutter's Close and the area of land where the Garden House Hotel now stands. Empty common takes its name from 'imps' or willow withies used in the basket trade which was centred on All Saints Parish in the 16th century<sup>21</sup>.
- 2.6.2 In her book *House by the River* Margaret Keynes writes, 'We used to call this part of Sheep's Green the fen because it was so marshy. The larger of the ancient riverbeds has been cleared out of late years to act as an overflow for the upper river, so there is always some water in it now to join the Cam at Newnham millpool. The shorter bed is dry, except in rainy seasons when it fills and floods over its banks into the ditches round the Lammis Land and the Big island... It was by this dry bed that the 12 trees were planted. If any of the willows still growing there look as if they were over 60 years old, then they are the survivors of those trees we planted that March day in 1903'<sup>22</sup>.
- 2.6.3 Willows and poplars make up the main body of the trees on Sheep's Green and Coe Fen. They are naturally short-lived species when compared with oak or lime. Pollarding considerably extends the life of such trees however. The historical map sequence shows that over the years these commons have had periods when they had a high tree cover and others when trees have been sparse or non-existent. (It should be remembered that the more recent OS maps do not tend to show trees with any great accuracy.) The Lombardy poplars on Sheep's Green would not occur naturally in this type of location. This tree was first introduced to England in 1758 and an illustration in 1879 shows a mature specimen growing on Sheep's Green (fig 5). The current trees are not therefore the recent introduction that they might at first appear to be. They have the advantage of providing tree cover while generating very little shade, something that is important for the meadow plants and some of the insect life as well as for the aesthetic appeal of sunlit grass. They also carry their own invertebrate life which is of interest.



<sup>20</sup> Syme A, *Coe Fen and Sheep's Green: a historical and ecological study of two Cambridge Commons*, 1986. Cambridgeshire Collection.

<sup>21</sup> Catherine Hall *Pers Com*

<sup>22</sup> Keynes M *House by the River*, 1984.



**Fig 5** An engraving of bathers on Sheep's Green showing a mature Lombardy Poplar tree (1879).  
*By courtesy of the Cambridgeshire Collection.*

## 2.7 Soil

- 2.7.1 The majority of Sheep's Green and Coe Fen lie on the alluvium associated with the river valley. Part of the eastern side of Coe Fen sits on the first terrace river gravel and part of the gault strip that extends through Coe Fen Straits and New Bit. The remainder of New Bit lies on the second terrace river gravel (appendix 2).

## 2.8 Ecological Importance

- 2.8.1 Sheep's Green and Coe Fen (including New Bit) were designated as City Wildlife sites in the 1996 Local Plan following the Cambridge Wildlife Strategy produced in 1991. They are also parts of the River Cam County Wildlife Site. During June to October 1998 a field survey of the Phase 2 type was carried out to identify the main habitat types and look for species that are indicators of certain recognisable plant communities<sup>23</sup>. The species recorded during that survey period are available in the *Cambridge City Wildlife Site Survey 1998*. This does not mean that other species do not exist there, merely that they were not recorded during the survey. The sites' wildlife status remained unchanged following this more detailed review. Coe Fen qualifies as a County Wildlife Site for pollard willows and because it supports a population of vascular plants species that is rare in the county. Sheep's Green also qualifies as a County Wildlife Site for pollard willows. The Mill Pool does not qualify for City Wildlife Status in its own right but the site forms part of the River Cam County Wildlife Site.
- 2.8.2 A detailed description of the sites is given in appendix 3. The main habitat of Sheep's Green and Coe Fen is improved or semi-improved grassland. This means that some fertilizer has been applied to increase the yield for grazing and/or it has been mown in the past. There are some clumps of bramble and other shrubs and hedges adding structural variation, shelter and a food source for birds, small mammals and insects. Permanent and seasonal watercourses and drainage ditches run through the area. Some of the banks are piled while others shelve more gently into the water and are trampled by the cattle giving a range of water edge habitats. A small weir allows water from the main river channel to form a stream flowing across Sheep's Green and ultimately into the millpool at the Newnham Mill. The additional aeration created allows a wider range of wildlife to be sustained in the stream. However in parts of Snobs Stream there is a significant amount of the alga *Enteromorpha* which is an indicator of poor water quality. In periods of high rainfall the topographical irregularities allow water to remain in some depressions and old watercourses. This gives rise to a range of conditions favouring plants with different moisture requirements and tolerances and the specific habitat requirements for some invertebrates. There are a large number of pollarded willows with some maiden trees of mostly willow and poplar. These form part of the white willow population that extends along the River Cam for some distance from the city towards Waterbeach. There is an important invertebrate community associated with the dead and living wood of the pollards that has developed over a long period<sup>24</sup>. There are Biodiversity Action Plans for many of these habitats.



<sup>23</sup> *The Wildlife Handbook Version 2*, section 2.5.3 etc. The wildlife Trusts 1997.

<sup>24</sup> Kirkby P *Sites of interest for nature conservation report of survey 1992/3*, for Cambridge City Council.

## 2.9 Archaeology

- 2.9.1 Sheep's Green and Coe Fen lie to the south east of the historic core of Cambridge and their north end is the location of the city's Medieval mills and ponds. Beyond them to the south numerous cropmarks of trackways and enclosures indicate extensive settlements probably dating to the Iron Age and Roman periods (Sites and Monuments Record Numbers 05031, 09601, 09603). However it is not known whether these complexes extend into Sheep's Green and Coe Fen themselves.

## 2.10 Current management practice

- 2.10.1 Until recently the grassland management has largely been based on choosing stocking levels of cattle and horses that reflected the grazing that was available for the stock rather than levels that would most benefit the wildlife. The overall management aim today for the vegetation, water bodies and wetlands of these commons is to retain a mosaic of habitats for plants and animal life in this semi-natural environment. The 1998 survey by the Wildlife Trust is an excellent foundation for developing a more extensive knowledge of the wildlife these sites support. Details of the fauna and other plant groups needs to be added and from this decisions can be made on a management regime that will best protect particular species and provide a wide range of habitats for others.



- 2.10.2 The picnic area at the south of Sheep's Green is mown by machine every 10-14 days during the growing season. The shrub beds range in specification from amenity to semi-natural and all need reappraising to decide whether or not to replant and if so what species to use.

- 2.10.3 The management of the River Cam at Sheep's Green and Coe Fen, its associated ditches, banks and structures is shared between a number of bodies. The Environment Agency is responsible for the main river and Snobs Stream<sup>25</sup>. It is responsible for flood prevention, pollution control, and fisheries. The Cam Conservancy is a statutory body and is the navigation authority for the River Cam between the Bottisham Lock and Byron's Pool at Grantchester, making byelaws to ensure safe navigation along this length of the river. The City Council is responsible for the retention of the riverbank and they maintain the ditches with the riparian owners. The sluice gate just south of Laundry Green is owned by the City Council and is operated by the Cam Conservancy under a Service Level Agreement. Thus when the nearby river level monitor warns that river levels are rising, Cam Conservancy staff make the necessary adjustments. The weir above the Mill Pool on the site of the former Bishop's and King's Mills has no control mechanism, although a board is taken out of the top in winter so the level of the upper river is kept about 30cm higher in summer. Vicar's Brook, which branches from Hobson's Conduit at the Trumpington Road Bridge, is classified as an 'Awarded Watercourse'.



<sup>25</sup> John Crawford, *Who Drains What? An overview of responsibilities for drainage engineering matters in the city*, Cambridge City Council, August 2000.

The early 19th century Enclosure Award made certain important watercourses the responsibility of the City Council regardless of the ownership of the land they flow over. The Vicar's Brook also carries surface water runoff from Trumpington Road.

- 2.10.4 Snobs Stream, the mill race to the Newnham Mill, is classified as 'main river' and the Environment Agency has a direct responsibility for ensuring that it remains free flowing and unobstructed. However there is currently no contract for regular clearance of vegetation funded by the Agency. It does however fund the Cam Conservancy to clear litter from the water.
- 2.10.5 There is no need to keep the middle ditch on Sheep's Green leading to the Newnham Mill Pool regularly dug out, as it serves no real drainage role. The water that flows into it comes over the small sluice on the main river by the Learner Pool, preventing the ditch from becoming stagnant. Although there is a control mechanism by this sluice it is never altered. The paddling pool on Lammas Land is drained into this ditch each year at the end of the season when the chlorine has dispersed, passing first under Snobs stream.
- 2.10.6 In recent years the middle drain on Coe Fen has been kept clear using a machine which cuts the a central channel through the vegetation leaving the margins intact. The majority of this chopped vegetation with its associated invertebrates floats down river and only a relatively small amount is tossed up onto the banks to rot reducing the undesirable enrichment of the soil which leads to development of rank vegetation.
- 2.10.7 The river edge piling is funded by the City Council managers of the adjacent land. The west bank of the main river was strengthened by steel and concrete piles in 1993 from the site of the Mills upstream to the Learner Pool. The Garden House Hotel carried out work on the east bank. Timber piles have been used from Fen Causeway to the north of Robinson Crusoe Island and around Laundress Green and the former Lammas Land Nutter's Close, to strengthen the banks eroded by the cattle and periodic floods.
- 2.10.8 The willow pollards are managed by an assessment of their growth rather than by a routine cycle of pollarding. This is one element of management that needs early consideration. The current philosophy of tree management on Sheep's Green and Coe Fen is one of minimum intervention.

## **2.11 Legal ownership and status**

- 2.11.1 Sheep's Green and Coe Fen are common land registered under the Commons Registration Act 1965 and managed by the City Council. The Cambridge City Council Act 1985 rationalised the powers of the Council concerning the grazing of the commons, allowing it to prescribe the procedure for the registration of commoners entitled to graze animals on the commons and to make a reasonable charge for such registration. In addition the Council is able to determine which commoners may graze animals the following grazing season and the number of animals each may graze. The Council is also permitted to charge a reasonable sum for the exercising of these grazing rights and to prohibit the grazing by other animals.

## 2.12 Statutory designations

### 2.12.1 Conservation Area status

Sheep's Green and Coe Fen, lie in Conservation Area No 1. Any development works require planning permission and are required to preserve or enhance the character or appearance of the area. The trees have protection afforded to them by being located within the Conservation Area.

### 2.12.2 Local Plan Policies

Sheep's Green and Coe Fen are subject to the following Local Plan Policies:

- NE 3 The setting and special character of Cambridge will be protected by a green belt, the inner boundary of which is defined on the Proposals Map.
- NE 4 Proposals for development within the green belt will be in accordance with the policies set out in the Cambridgeshire Structure Plan (1989) and Cambridge Green Belt Local Plan (1992).
- NE 6 Development will not be permitted which would result in the loss or partial loss of open spaces of environmental and/or recreational importance. These areas are identified on the (Local Plan) Proposals Map.
- NE 10 Development on the flood plain of the River Cam and the Bin Brook will only be permitted where the applicant is able to demonstrate to the satisfaction of the City Council that the development will not:
- a) increase the risk of pollution;
  - b) increase the risk of flooding or be subject to flooding itself; and
  - c) have a harmful effect on the nature conservation interest of the River Cam, the Bin Brook or their flood plains.
- NE 12 The City Council will seek to conserve the nature conservation interest of the City Wildlife Sites identified on the Proposals Map, or subsequently identified in the City, by controlling the type and extent of any development where it is allowed on such sites. In considering development proposals affecting City Wildlife Sites the Council will take into account:
- a) measures to protect the nature conservation interests;
  - b) proposals to provide replacement habitats; and
  - c) the wildlife significance of the site, in terms of both the local context and its intrinsic importance.
- NE 13 The City Council will seek to protect sites of special scientific interest and sites identified as holding species protected under the Wildlife and Countryside Act 1981 by not allowing on or adjoining to them development which will have an adverse impact.

- NE 14 The City Council will seek to protect City Wildlife Sites by not normally giving planning permission for land reclamation, land drainage and other large scale developments either on, or likely to materially affect such sites. Where these are proposed the City Council will, where appropriate, require a full environmental assessment and will liaise with nature conservation bodies on the terms of reference of the assessment. In the event of the proposal being granted planning permission, existing features of nature conservation value will be retained during works, site restoration and development.
- NE 15 The City Council will in partnership with others, take steps to protect and enhance the nature conservation value of green spaces, wetlands, water courses and other features, including hedges and corridors. The impact of development proposals on the wildlife corridors illustrated on the Proposals Map will be an important factor to be taken into account in considering planning applications.
- RL 2 The City Council will encourage existing open spaces to be used for a mixture of formal and informal activities and will encourage the improvement of facilities and safety measures to improve access for people to a wide range of recreational and sporting activities.



### **3. ASSESSMENT OF SIGNIFICANCE**

*This section aims to make an assessment of the value of the main components and characteristics of Coe Fen and Sheep's Green to ensure that managers now and in the future are aware of the features they should try to conserve in their management proposals. A table summarising the significance, its vulnerability and the conservation guidance to protect it is set out in appendix 4.*

#### **3.1 Summary of the heritage significance of Sheep's Green and Coe Fen.**

- 3.1.1 Sheep's Green and Coe Fen lie alongside a part of the River Cam whose course was modified at least 900 years ago to supply power to three corn mills. Frequent flooding has kept this as grazing land and although highly valued in the past when the large number of animals involved in farming and transport needed pasture, today they have a more recreational role. Their location between the city centre and areas of housing means that large numbers of people, as pedestrians and cyclists, use them daily as a traffic free shortcut and as an accessible informal recreational area for walking, picnicking, punting, canoeing, fishing, and swimming in the Learner Pool.
- 3.1.2 A survey in 1998 by the Wildlife Trust categorised Sheep's Green, Coe Fen and the Mill Pool, as part of the River, as County Wildlife Sites. The combined value of this wide range of habitats which includes: grassland, pollard willows with live and dead wood, water bodies and wetlands, all together on one site so close to the city centre increases their importance further. Their accessibility and proximity to a range of educational establishments makes them a valuable resource for all age groups.
- 3.1.3 They play an important townscape role, having a very positive relationship with some of the buildings that overlook the open space. Together they form a transitional space between the wider countryside and the central urban area.

#### **3.2 Archaeological potential or importance**

- 3.2.1 Although Sheep's Green and Coe Fen have a largely amenity and recreational use in 2001 it must be remembered that they lie adjacent to the historic core of the city and land that was at one time bustling with activity associated with the river before the advent of the railways. Evidence of numerous cropmarks, track ways and enclosures to the south indicate extensive settlements probably dating from the Iron Age and Roman periods and although it is not known whether these extended into Sheep's Green and Coe Fen, those carrying out any excavations should be aware that the possibility exists.

### 3.3 Architectural history or design significance

- 3.3.1 The Grove Wall of Peterhouse built in 1501-2 with its half buried water gate is, despite many repairs over the years, an important structure both in its own right and as something that forms the enclosure of this part of Coe Fen. A map in the college archives of about 1820 shows the adjacent medieval Coe Fen ditch was at one time fed from Hobson Conduit in Trumpington Street and that this in turn fed a bath in the Scholars' Garden at Peterhouse.

### 3.4 History of the open space

- 3.4.1 Sheep's Green and Coe Fen provided valuable pasture land particularly in the 13th century when there was great pressure to cultivate all available land<sup>26</sup>. Those who had land-holding rights in the common fields were able to exercise rights over the common land along the river. The same people had rights to grow willows along drainage channels. Loggan's Map of 1668 shows this practice particularly well. Fishing rights to the Cam belonged to the town, which sold licences to fishermen<sup>27</sup>. Sheep's Green and Coe Fen have continued to be managed by grazing, although the objectives have changed recently to achieve stocking levels compatible with providing benefits to wildlife rather than maximising yields from the grazing. It is known from accounts by people such as Gwen Raverat that the land and the river also had informal recreational value during the first half of the 20th century and this had probably been the case for a long time before (fig 6). The view was considered attractive enough to build a Spectaculum or look out tower in the Grove Wall of Peterhouse. It must have seemed a refreshingly unpolluted part of town in comparison with life close to the market area or the sewage filled King's Ditch. The Newnham, King's and Bishop's Mills were very much part of the activity of the area for over 900 years and the associated river traffic on the mill ponds must have provided a stark contrast with the adjacent lush grazing and willow pollard landscape.
- 3.4.2 The network of definitive footpaths reflects the routes established over time between the town centre and Newnham and settlements to the south and east of these open spaces (appendix 1).

### 3.5 Community, commemorative or social value

- 3.5.1 Sheep's Green and Coe Fen are registered common land under the 1965 Registration of Commons Act. They are highly valued today for their amenity and informal recreational value. They provide important pedestrian and cycle links between the city centre and the surrounding area.
- 3.5.2 There is a long term objective to form a riverside walk from beyond the Grantchester Meadows and from Ninewells following Hobson's Conduit. These would link at Coe Fen and Sheep's Green, continuing along the Backs and Colleges to the north and through Jesus Green, Midsummer and Stourbridge Commons out to the countryside in the north east. Coe Fen and Sheep's Green currently play their part in other local walks and in the future could be part of a more extensive route around Cambridge, providing numerous access points. Existing parts of these walks need to be safeguarded and opportunities taken to secure further sections.

<sup>26</sup> Hall, CP, and Ravensdale, J (1976) *The West Fields of Cambridge*, Cambridge Antiquarian Record Society.

<sup>27</sup> Taylor, A 1999. *Cambridge, The Hidden History*, p81. Tempus.



**Fig 6** The Men's bathing place at Sheep's Green  
By courtesy of the Cambridgeshire Collection. Ref: swi ki 32303

### 3.6 Ecological value

- 3.6.1 Following the 1998 Wildlife Survey it was decided that Coe Fen qualifies as a County Wildlife Site for pollard willows and because it supports a population of vascular plants species that is rare in the county. Sheep's Green also qualifies as a County Wildlife Site for pollard willows. The Mill Pool does not qualify in its own right but the site forms part of the River Cam County Wildlife Site. These open spaces are one of the most appropriate places in the city where the habitat value of standing and lying dead wood can be accommodated, with suitable management.
- 3.6.2 The Planning Policy Guidance: Nature conservation (PPG 9, 1994) affords the nature conservation value of locally designated non-statutory sites some status.
- 3.6.3 The city centre location of this area of semi-natural habitat, its connection to the wider countryside to the south and its place in the river corridor gives it an additional value to wildlife over and above the component habitats it contains.
- 3.6.4 Many of the individual habitats may not be of particular rarity value but within Coe Fen and Sheep's Green the combination of habitats makes the site important to species which benefit from this variety.
- 3.6.5 *Grassland*  
The cowparsley *Anthriscus sylvestris* and meadow buttercup *Ranunculus acris* may be a valuable food source for insects in spring before the grazing begins to have its impact. It is possible that important botanical species remain in the semi-improved grassland. The thistles and nettles provide food and breeding sites for a range of invertebrate life.

### 3.6.6 *Scrub*

The bramble clumps *Rubus fruticosus* in addition to offering food for insects also provide protection for small mammals, roosting and nesting opportunities for birds. The shrub layer is valuable for providing structural variation and shelter.

### 3.6.7 *Pollarded willows and old trees*

Cambridge has an ancient tradition of pollarded willows<sup>28</sup>. They sustain an important range of invertebrates<sup>29</sup> because of their large number; the old age of some of the trees; the diversity of dead and live wood habitats; the fungi they support and the presence of ivy.

### 3.6.8 *Water and wetland*

3.6.8.1 The river, millstream, major and minor ditches, seasonal channels and temporary pools provide a wide range of wetland habitats. Some have the potential to be of greater value to wildlife by sensitive management.

3.6.8.2 The trampling of water margins by grazing animals creates valuable colonisation opportunities for some plants. Similarly the slumping and softening of the banks through erosion from periodic flooding also allows a marginal vegetation to develop. This can in certain situations protect the bank from further erosion. Various plants are associated with the different types of piling and bank profiles.

3.6.8.3 The shallow depressions in the grassland arising from the slight irregularities in the topography might easily disappear without grazing to keep them free from choking vegetation. These temporary water bodies are important in supporting particular invertebrates, some of which are only found in such conditions. The water quality is often much higher than in the permanent ditches or watercourses because it only comprises water draining from the immediate surroundings. These subtle depressions may not be immediately noticeable during dry parts of the year or in dry winters. Any temptation to deepen them into permanent ponds or to fill them to make dry ground should be resisted.

3.6.8.4 The permanent and seasonal watercourses and drainage ditches support important communities of aquatic plants whose interest has not diminished in the last 50 years according to a local expert. The marginal and aquatic invertebrates of the larger water bodies are of interest while the smaller ditches will probably have their greatest wildlife interest associated with marginal vegetation, leaf litter and mud. Further survey work is required to assess the aquatic and marginal invertebrates in different types of water bodies to provide indicators of quality and to guide their management.

3.6.8.5 In addition to the surveys carried out in 1992-3<sup>30</sup>, 1995-96<sup>31</sup> and 1998<sup>32</sup> more detailed survey work is needed to give a better understanding of the ecology of Sheep's Green and Coe Fen. This will in turn lead to more appropriate management of the area and identify opportunities for habitat enhancement.



<sup>28</sup> Rackham O 1994. Old pollard willows. *The Wildlife Trust Magazine* no. 10:4-5.

<sup>29</sup> Kirkby P *River Cam Towpath Willows, Haling Way Invertebrate Survey 1995-96*. Report to the Green Belt Project Feb 1996.

<sup>30</sup> Kirkby P *Sites of interest for nature conservation report of survey 1992/3*, for Cambridge City Council.

<sup>31</sup> Kirkby P *River Cam Towpath Willows, Haling Way Invertebrate Survey 1995-96*. Report to the Green Belt project Feb 1996.

<sup>32</sup> The Wildlife Trust, *The Cambridge City Wildlife Survey*, 1998.

### **3.7 Educational or public potential**

- 3.7.1 The central location of Coe Fen and Sheep's Green makes them accessible to visiting educational parties of all ages within the city. They are a convenient location for study by schools and higher education institutions, a number of which are within walking distance. Not only can such groups add to the body of knowledge available on the sites but also increase their own understanding and appreciation of the local environment. The Leys School has used them as an educational resource for some time and students from the University of Cambridge Zoology Department have based individual project work here.

### **3.8 Public or recreational value**

- 3.8.1 This semi-natural grassland so close to the city centre and adjacent housing areas provides an ideal environment for informal recreation and a number of seats are provided throughout the area. Links with the wider footpath network enable people to take longer walks to the south to Grantchester and beyond.
- 3.8.2 The picnic area adjacent to the Learner Pool at the south end of Sheep's Green provides an area of short grass free of large animals. This facility along with the paddling pool and playground on Lammas Land is available to people from the surrounding neighbourhoods as well as those from outside the area, since the car park is placed conveniently close by and a number of bus routes pass near.
- 3.8.3 Cambridge is famous for its punting and the stretch of river above the Mill Pool to Grantchester is very popular. Scudamore's boat hire is a hive of activity in the summer months and a focus of interest at Laundress Green as novices set off. The Cambridge Canoe Club is based on this upper stretch of river where the water is less likely to be polluted.
- 3.8.4 Laundress Green provides a valuable grass sitting area in summer where the activity of the punts above and below the weir adjacent to the Mill Pool at Silver Street Bridge can be watched. On warm summer evenings people overflow from the nearby pubs and enjoy the rural atmosphere right on the edge of the city centre.

### **3.9 Contribution to townscape character**

- 3.9.1 The contrast with the urban surroundings is felt particularly from Silver Street Bridge where the groomed grounds of the colleges lie to the immediate north and the landscape of Sheep's Green with its wandering cows to the south. Sheep's Green and Coe Fen are long narrow spaces and the enclosing tree planting is important in buffering them from the urban surroundings as well as for dividing and enclosing smaller spaces within them. Some of this important planting is on private land. A number of high quality buildings and structures are framed by the surrounding trees and hedges, giving Sheep's Green and Coe Fen a transitional role between the wider countryside

and the urban centre. The scale of the spaces means that buildings such as King's College Chapel and towers of some of the city churches are visible over a considerable distance. The high quality of the enclosing skyline is therefore an important characteristic of these open spaces.

- 3.9.2 Each day large numbers of people are able to enjoy views of Sheep's Green and Coe Fen from overlooking streets and when they cross them using Fen Causeway. In summer at least, the numerous trees partially conceal the road from within the fen, making it much less obtrusive than might be expected.

### 3.10 Natural or aesthetic beauty

- 3.10.1 A valuable contribution is made by the trees on surrounding land. The ground vegetation is at its most dramatic in early summer when the buttercups and cowparsley are in flower. The tall spires of the Lombardy poplars cast little shade, forming visual accents in the landscape. The balance of sunlit and shaded grass is influenced by the ratio of these narrow trees and those with a more spreading habit. The grazing cows complete the pastoral scene. This semi-natural landscape reinforces the seasonal variation of the English climate, unlike the environment within more urban areas that tends to insulate city dwellers from such change.



## 4. DEFINING ISSUES

*This section identifies the issues that have affected the significance of Sheep's Green and Coe Fen, affect them now or may do so in the future. These are the issues that may make the significant features vulnerable. A summary is set out in appendix 4.*

### 4.1 Ownership and present management

- 4.1.1 The landowners to the south of Coe Fen and Sheep's Green require the swift removal of the water from their land and a trapezoidal ditch profile has been created in the past to achieve this. This profile of some of the ditches and the piled river margins prevent many marginal plants establishing and makes passage in and out of the water for wildlife difficult. Where some sections of the central ditch on Coe Fen have been broadened out and the edge given a gentler gradient the quality of the habitat has been greatly improved. There is space for emergent plants with their associated invertebrate communities in quieter water, while still permitting the necessary drainage water flow. There are other opportunities where marginal shelves and slacker gradients could be created at the edges of the water and variation of the depth would produce areas of sheltered water for fish. Maintenance can be carried out from one bank leaving the marginal vegetation intact on the other side of the water body.
- 4.1.2 If clearance work is carried out along whole lengths at the same time the effect on the wetland wildlife is very damaging. A more sensitive approach is appropriate in some ditches to clear smaller areas on a cycle so that recolonisation can take place from adjacent parts of the ditch while still maintaining an adequate flow of water. The deposition of the nutrient rich material on the top of the banks leads to the development of rank vegetation.
- 4.1.3 There is little evidence water voles are found on Sheep's Green or Coe Fen. They may be encouraged into them from the surrounding areas by providing some lengths of bank with protection from cattle to reduce the disturbance from trampling. However excluding cattle would reduce this poaching which is responsible for some of the botanical interest.
- 4.1.4 Management of the vegetation has to take into account a number of potentially conflicting requirements. There may be public pressure to achieve the appearance of a meadow that typically provides good grazing. However these open spaces are being managed with different objectives. Where thistles would be unwelcome in the former situation, in an environment that is being managed to increase the wildlife benefit it is desirable to have some patches of them in sunny open areas to attract insects. Trees inevitably cast shade and a balance has to be found between providing appropriate tree cover and a proportion of open meadow. Practical issues of ensuring adequate drainage of farmland south of Coe Fen could, but need not, conflict with measures to enhance wildlife habitats in the central ditches.



## 4.2 Use

- 4.2.1 Fen Causeway severs the north-south footpath and cycle routes, and while the pedestrian crossing at the west end effectively overcomes this barrier, there is no convenient equivalent to link the Coe Fen paths towards the east. At certain times of day people have to hover at the road side for long periods waiting for a gap in the traffic to allow them to cross, making a traffic island, formal crossing or underpass necessary.
- 4.2.2 Selective feeding by both cows and horses means that some non palatable species are ungrazed and therefore have a competitive advantage. Unselective feeders such as sheep and goats are able to tolerate a rougher diet and will keep the problem vegetation in check. However confining them on the fen could prove difficult, making mechanical cutting at the appropriate time or the use of selective herbicides a more realistic option in the control of certain plants.
- 4.2.3 Horses on Coe Fen can be intimidating to walkers. They learn to expect food from people and pursue them or prevent them crossing the bridges unless rewarded. Some people feel very threatened in this situation especially when they have small children with them and for this reason horses have been removed from the common in recent years.
- 4.2.4 Although there is an adequate number of litter bins on Laundress Green for parts of the year, people are not always careful to dispose of their litter safely. Apart from being unsightly, there is a danger that the cattle will inadvertently ingest items. Additional temporary bins are installed for the summer season to increase the available capacity.

## 4.3 Physical condition

- 4.3.1 Archaeology  
A lack of understanding about the modifications made to the river in the past to supply the mills might mean that the significance of the original course is not recognised. There is a danger that the often semi-dry depressions that meander across Sheep's Green might be tidied up by infilling and seeding over with consequent loss of valuable habitat variety and evidence of the earlier river pattern.
- 4.3.2 If all the trees on these three commons were to be assessed in accordance with the criteria set out in British Standard 5837 and PSULE it is likely that about two thirds would be shown to be at the end of their safe useful life. If the public used the grass areas significantly, common sense would dictate the felling of a large number of trees and the judicious lopping of many others. As people mainly stay on the metalled paths and Laundress Green, decaying and broken trees away from these routes can be retained for their habitat value. However the liability risk needs to be acknowledged, the pattern of public use monitored and the management of trees altered accordingly. It is suggested that all the mature trees should be

evaluated using the specialist survey method for veteran trees published by English Nature in order to assess them as habitats. The safety assessment may still be the overriding factor in determining necessary maintenance or even felling but this combined methodology should achieve a balance.

#### 4.3.3 Trees

Dilution of the willow planting along the west side of Coe Fen with other tree species will lead to the fragmentation of the invertebrate habitat. These commons have the feel of desperately needing replanting, but careful analysis and above all a long-term strategy to guide new planting and management are needed. Despite the poor condition of the majority of the existing trees, caution must be exercised in planting replacement trees in existing spaces as this would alter the balance of light and shade on the grassland with possible harmful effects on the biodiversity.



#### 4.3.4 Structures and artefacts

4.3.4.1 A change to a less conspicuous colour scheme for the timber and metal bridges might seem a good idea in some ways but it is important that people unfamiliar with Sheep's Green and Coe Fen should be aware of the links with other parts of the open spaces to give them a sense of security. In addition there will always be some people who will use the bridges in fading light. A colour scheme that includes some pale reflective areas is therefore necessary.

4.3.4.2 Fen Causeway should live up to its name and as far as possible should appear to be crossing the open space without separation from it. With grazing cattle to contain it is impossible to achieve this completely but this aim should guide the positioning and choice of fencing materials. Perhaps in time there will be the resources to install an inconspicuous metal parkland style fence. Appropriate management of the summer flush of vegetation would enable the existing timber fence to be concealed for a few months of the year.



4.3.4.3 Over the years the pedestrian footpaths have been established along routes that take people from their homes to the city centre and back. It is not surprising that cyclists find the same routes valuable and that these should play their part in the Council's policy to encourage cycling in preference to car travel. Adequate path surfaces need to be provided to take erosion during flooding and the concentrated wear. They need to be of an appropriate width to avoid conflict between speeding cyclists and pedestrians. However careful design and choice of materials are necessary to avoid these routes becoming too dominant in the rural setting. Any pressure for additional lighting should be resisted or the suburban conversion would be complete.

#### 4.3.5 Grounds maintenance

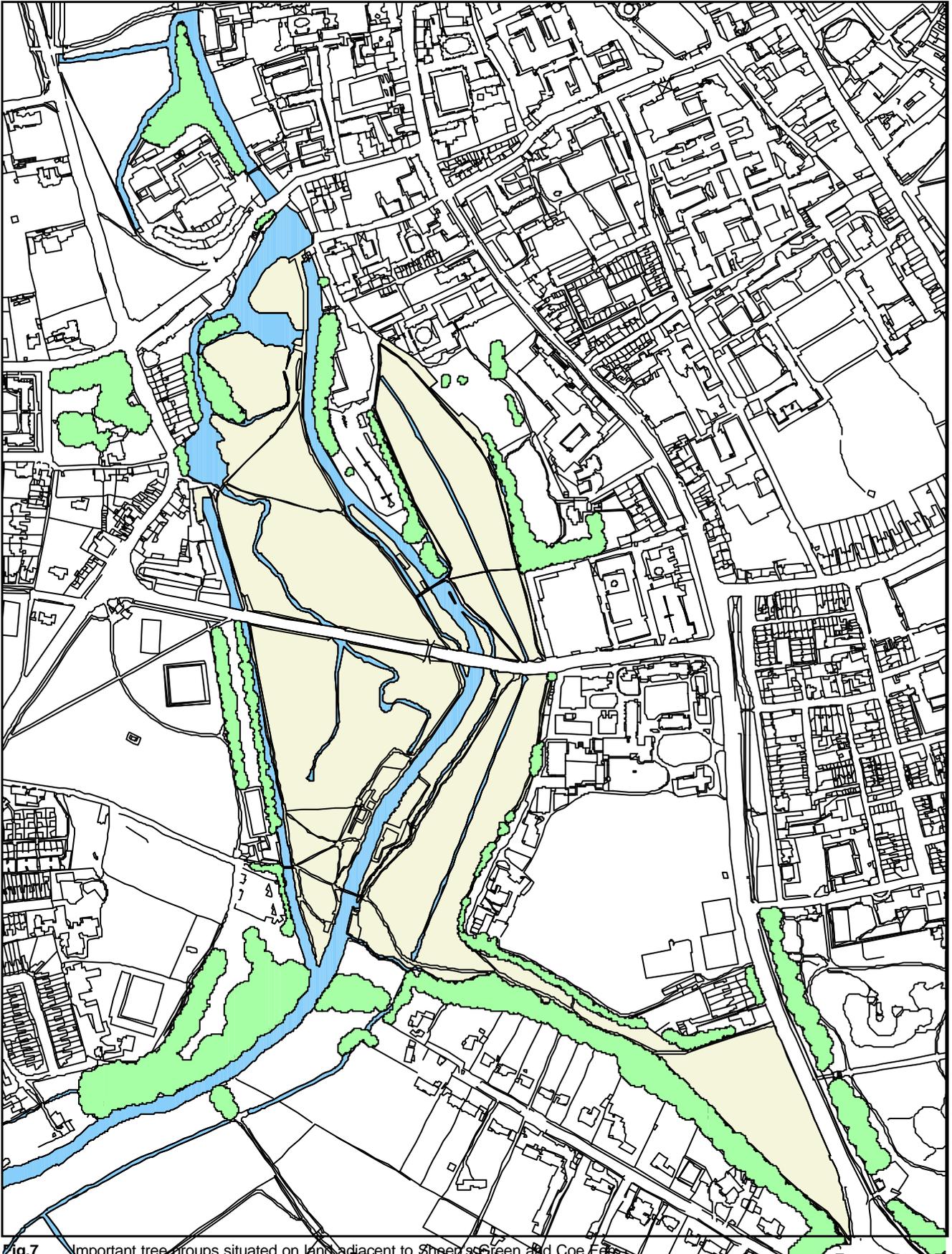
4.3.5.1 A popular perception is that nettles and thistles indicate a poorly managed meadow. If the objective was maximum grass production for beef this would be true however nettles and thistles are host to a range of invertebrates many of which are part of the food chain for higher species and are therefore important for nature conservation. It is still possible to control the extent of these plants by selective cutting, spraying, and by more flexible grazing regimes.

#### **4.4 Area and boundaries**

- 4.4.1 Many of the trees and hedges that frame Sheep's Green and Coe Fen in particular are not within the open spaces but lie on adjacent private land (fig 7). This enclosed character is highly vulnerable to the loss of trees and to the intrusion of the adjacent urban areas. Conservation Area legislation gives some protection to tree removal but effective partnership needs to be developed between the Council and the surrounding land owners so that the wooded setting of the commons and their enclosure with native hedges does not gradually dwindle away. The scale and openness of these commons makes them vulnerable to the addition of tall buildings in the skyline even at some distance.

#### **4.5 Resources**

- 4.5.1 Adequate resources are needed to prepare a management plan for these commons. This will detail how the policies of the Conservation Plan could be implemented through the regular maintenance of the open spaces and individual projects.
- 4.5.2 When it is neither possible nor desirable for the finance derived from Section 106 Agreements to be spent on providing open space on the particular development site concerned, that funding may be used on other open space which benefits residents throughout the city. It is possible to combine smaller sums to finance large projects and Sheep's Green and Coe Fen would be eligible for such funding.
- 4.5.3 Successful sourcing of additional funding through applications to the National Lottery Distribution bodies, sponsorship, grants, landfill tax rebates and voluntary partnership trust contributions could increase the investment available to regenerate these and other city parks.
- 4.5.4 Since grazing levels are set in advance of each growing season, in a very dry year with relatively low plant growth rates the vegetation may be overgrazed. Conversely in very wet years excessive poaching by the cattle hooves can promote the spread of aggressive weed species and finer more palatable species are grazed in preference to coarser more vigorous ones. Resources and expertise would be needed for the management of a Council owned cattle herd but this would bring the benefits of flexibility of grazing times and make it possible to achieve lighter levels of grazing, favouring the nature conservation interests rather than meat production objectives. The commoners might exert their right to graze the common, although it would be possible to limit the numbers of animals.



**Fig.7** Important tree groups situated on land adjacent to Sheep's Green and Coe Fen

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## 5. CONSERVATION POLICIES AND GUIDANCE

*These are summarised in appendix 4.*

### 5.1 Conserve and enhance the relationship between Sheep's Green and Coe Fen and between them, their urban surroundings and users.

- 5.1.1 Maintain the sense of enclosure and mitigate the intrusive effect of those parts of the urban surroundings which have a less successful relationship with Sheep's Green and Coe Fen by managing the tree and hedge screen on public land effectively.
- 5.1.2 Develop good working relationships with the surrounding landowners to help them understand the contribution played by their trees to the landscape of Sheep's Green and Coe Fen. Through them seek opportunities to enhance the planting so that the surrounding vegetation screen is secure for the future.
- 5.1.3 Prepare planning briefs for any significant new developments or extensions to existing buildings in the area to ensure that all the issues concerning the sites' interrelationships with Sheep's Green and Coe Fen are taken into account. Require that these be of high quality and worthy of the location. Consider what impact tall developments even at a considerable distance, will have on the skyline around these open spaces.
- 5.1.4 Retain views into the New Bit part of Coe Fen by maintaining a semi-transparent tree screen along the boundary with Trumpington Road. Avoid detracting road signs intruding into the views from Newnham Road over the millpool towards the Granta Inn.
- 5.1.5 Retain views of those buildings on the boundary of the commons and those more distant ones on the skyline which make a positive contribution to the fen, to maintain the sense of transition between the wider countryside and the urban centre.
- 5.1.6 Maintain good access for a wide range of users so that the footpaths are available to those who would like to benefit from their convenience and amenity value. Choose surfacing materials that combine robust functionality with an appropriately rural nature. Avoid over development of the paths leading to a change of character of the spaces.
- 5.1.7 Consider the installation of a formal crossing or traffic island on Fen Causeway or improvements to the underpass to minimise the road's disruptive effect on the flow of pedestrians and cyclists along the north-south paths of Coe Fen and Sheep's Green.
- 5.1.8 Recognise the enormous educational potential these commons have for local schools, higher education establishments and other interest groups through their location and accessibility. Prepare interpretation material and hold educational events to assist in the wider understanding of the wildlife and history. Extend the valuable links already established with interested bodies and individuals, and invite their contributions to an information resource on the fen that can be added to over time and help guide management decisions in the future.



- 5.1.9 Recognise the strategic importance that Coe Fen and Sheep's Green play in linking a riverside walk along the Cam from Grantchester with the walk from Ninewells beside Hobson's Conduit, progressing along the Backs, through the city and its other commons, out to the countryside to the north east. Understand the part they could or already do play in other local and longer distance walks.
- 5.1.10 Recognise the relationship with Paradise and in particular Lammas Land recreation ground and the way the latter's facilities complement the use of Sheep's Green and Coe Fen.
- 5.2 Maintain Sheep's Green and Coe Fen as high quality spaces.
- 5.2.1 Produce a management plan to set out how the significance identified in chapter 3 should be conserved. Include ways of avoiding deterioration of the fabric and make recommendations for any refurbishment, new works and materials, devising programmes for their maintenance. As part of the management plan devise a grazing regime that best meets the objectives of habitat enhancement and maintains the aesthetic appeal of these commons. Draw up an arboricultural strategy to ensure appropriate new tree planting takes place and to give guidance on the management of the existing and future tree stock. Assess the existing mature and over mature trees for their wildlife value and devise a maintenance programme that balances this with obligations to public safety. In new tree planting use appropriate species at a density that maintains equilibrium between adequate sun for the meadow flora and invertebrates, and a tree cover which achieves the aesthetic qualities which people value. Include management guidance for the waterbodies and wetlands so that their habitat value is maximised. Identify ways of enhancing a wide range of habitats in accordance with the Biodiversity Action Plans so that the nature conservation interest of the whole common is increased.
- 5.2.2 Coordinate the objectives and actions of the various authorities which have responsibilities for maintaining different parts of the fabric of these open spaces.
- 5.2.3 Ensure that litter collection services respond to periods of high visitor usage to protect the cattle and the amenity of the area.
- 5.2.4 Ensure people clean up after their dogs.
- 5.2.5 As a reflection of the importance of these historic spaces, provide adequate resources so that the structures and artefacts, seats and paths are of high quality; appropriate; sufficiently numerous and able to be well maintained. Remove evidence of vandalism and make repairs promptly so that people see these places are cared for and feel secure enough to spend time in them.
- 5.2.6 Retain access to and develop qualified and skilled staff in landscape management, recreation provision, arboriculture, horticulture, community development and landscape architecture so that maintenance, enhancement and change are implemented in an appropriate way.
- 5.2.7 Utilise finance available from Section 106 Agreements and secure additional funding through applications to the National Lottery distribution bodies, sponsorship, grants, landfill tax rebates and voluntary partnership contributions.



## **6. IMPLEMENTATION AND REVIEW**

- 6.1 The Conservation Plan will be a material consideration in determining planning applications that have an impact on these open spaces.
- 6.2 In determining a planning application consideration will be given to the impact of the development on the open space. If a development is likely to have a negative impact then it may be appropriate to see if mitigation measures are possible or if necessary to secure these through planning conditions or as planning obligations. (Section 106 Agreements).
- 6.3 The Conservation Plan should be reviewed every five to seven years to assess whether the management objectives have changed. New conflicts may develop between significant features of the site; changes in conservation philosophy may take place; or further information may become available making this reappraisal necessary.
- 6.4 A project team representing the main internal stakeholders responsible for the management of Sheep's Green and Coe Fen should carry out this review. They are currently the Parks and Recreation Section of the Community Services Department and the Policy and Projects Section of the Environment and Planning Department.
- 6.5 The review should reassess the significance of the sites to establish whether it is still valid. In addition it should examine the issues that have affected the significance of the sites over that period, are affecting it currently and will affect it in the future. Taking this into account the review should then confirm whether the conservation guidance is still appropriate.



## **7. SUMMARY**

### **7.1 Purpose of the Conservation Plan**

- 7.1.1 After a general description of Sheep's Green and Coe Fen which aims to give a broad understanding of the past history and present context, the Conservation Plan attempts to set down all the significant features and qualities that it is considered desirable to pass on to future generations. There follows an examination of the issues that have threatened this significance in the past, do so at the present and may do in the future. Finally conservation guidance is provided so that as change inevitably takes place, this past value is accommodated in any new proposals. Applications for Heritage Lottery funding are recommended to follow this process.

### **7.2 The heritage merit of the site (section 3)**

- 7.2.1 In the past the common grazing land on Sheep's Green and Coe Fen was of particular value when all land that was capable of cultivation was under the plough. In more recent times it has had a more recreational role with the river being used for swimming, boating and punting and the grassland for its amenity value while continuing to be grazed by cattle and horses. The semi-improved grassland, the wetlands and watercourses, the pollarded willows and other trees combine to form a wide range of habitats which are recognised by the designation of Sheep's Green, Coe Fen and the Mill Pool, as part of the river, as City Wildlife Sites in the 1996 Local Plan.
- 7.2.2 The location means that many people have access during the day for recreational and educational purposes and can also enjoy them as they pass through on their way between home and the city centre. The positive relationship between some of the adjacent buildings and the commons gives them a transitional role between the wider countryside and the urban centre.

### **7.3 How that merit is sensitive or vulnerable (section 4)**

- 7.3.1 Inappropriate management of the grassland, overzealous scouring of ditches and wetlands, poorly programmed tree pollarding, unsuitable species and placing of new tree planting are some of the ways in which the nature conservation value of these open spaces can be damaged.
- 7.3.2 High water quality is important for wildlife as well as the river based recreational uses, but this is influenced by what discharges occur in the river catchment area. Adequate financial resources are needed for general maintenance on the fen so that although the vegetation is informal, it is clear that these areas are well cared for. Without plenty of seats and good paths people will not be encouraged to spend time there, providing informal surveillance and making it feel a safe place.
- 7.3.3 The landscape quality of these commons is dependent to a large extent on their relationship with the surrounding area. Loss of the screening trees and hedges on both public and private land would diminish the rural nature and the adjacent urban area would be much

more intrusive. The quality of buildings that are visible from within the commons also has a major effect on the character of these open spaces.

## **7.4 Conservation Guidance (section 5)**

### **7.4.1 Conserve and enhance the relationship between Sheep's Green and Coe Fen and between them, their urban surroundings and users.**

Maintain well-defined access between the two spaces and with their surroundings so that new users easily understand the routes across them. Encourage good management and renewal of the tree and hedge screen that acts as a buffer between the commons and their urban neighbours, working with private owners to achieve this. Prepare planning briefs for major developments that might affect these commons. Consider the implications of tall buildings intruding into the skyline even at some distance from Sheep's Green and Coe Fen. Retain the benefit of certain viewpoints from neighbouring areas into these open spaces and be aware of the positive contribution some high quality buildings bring when viewed from within the fen. Encourage the use of these commons for educational purposes at all levels, inviting contributions to an information resource that would form a background to interpretation material and help guide management decisions.

### **7.4.2 Maintain Sheep's Green and Coe Fen as high quality spaces.**

Produce a management plan to safeguard the wildlife value of these commons and provide opportunities for habitat enhancement. Make recommendations for refurbishments and new works to avoid the deterioration of the infrastructure and artefacts. In addition ensure that planned provision is made for new planting along with the maintenance of existing and future trees to maintain the character of these open spaces. Ensure that day-to-day maintenance responds to periods of high visitor usage so that people can see that, although informal, the commons are well cared for spaces and respect them as such. Retain and develop skilled staff so that maintenance, enhancement and change are implemented in the appropriate way. Supplement the normal maintenance funding by securing additional finance through applications to the National Lottery distribution bodies, sponsorship, grants, landfill tax rebates and voluntary partnership contributions.

## **7.5 Implementation and Review (Section 6)**

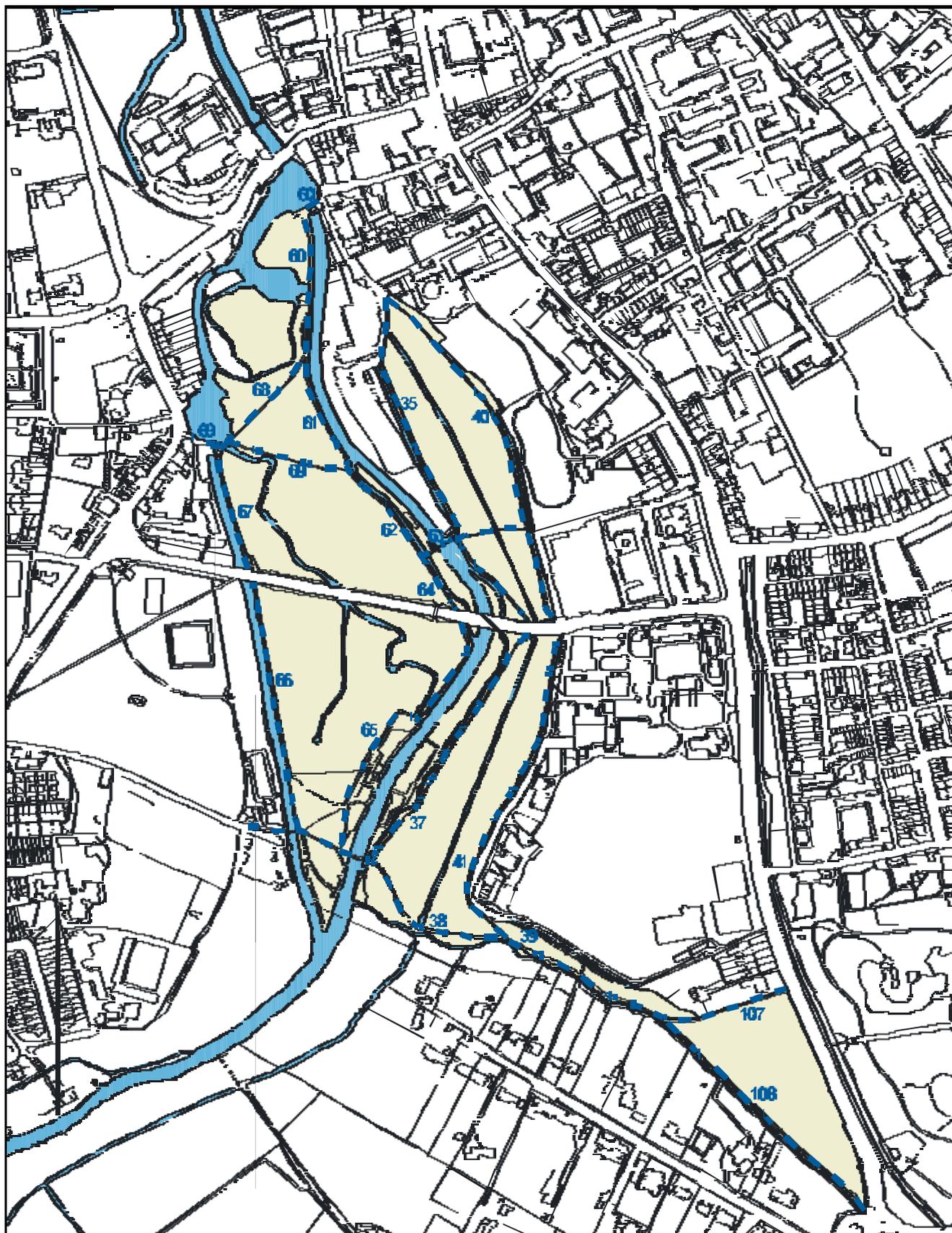
7.5.1 Following adoption by the Community Development and Leisure Committee the plan will provide guidance for managers of the open spaces. Endorsement by the Environment Committee will enable the plan to be considered as material consideration on planning matters concerning the development of sites around these open spaces.

7.5.2 A project team representing the main internal stakeholders should review the Conservation Plan every five to seven years to ensure that the conservation guidance is still relevant in view of any changes which may have taken place or any new information which has become available.

**APPENDICES**

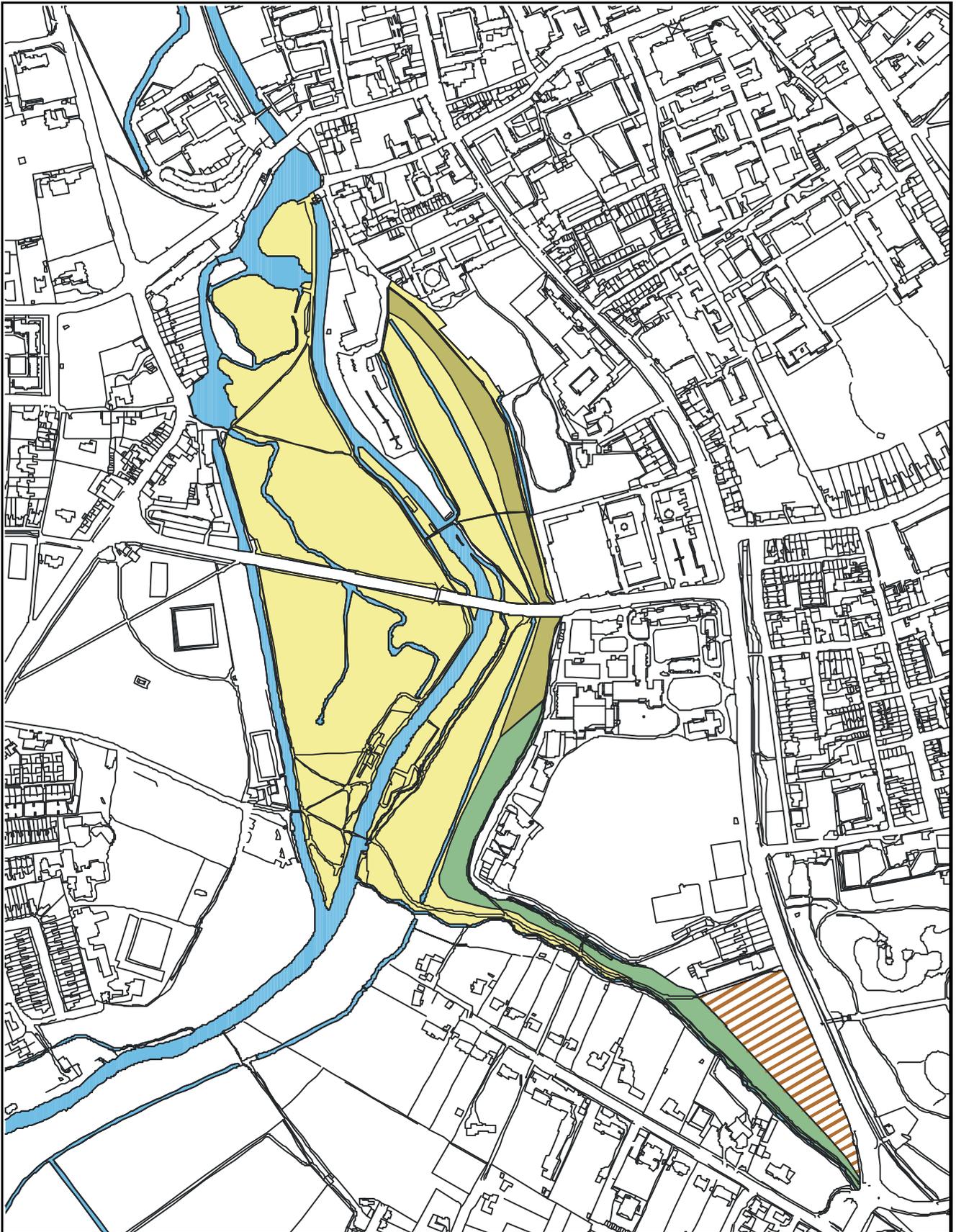
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**APPENDIX 1** Definitive Footpaths

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**APPENDIX 2** Soils

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**APPENDIX 3** An extract from the Cambridge City Wildlife Site Survey 1998, prepared by the Wildlife Trust for Cambridge City Council.

### Site Record Sheet

Site Name: Sheep's Green  
 Site code: E4.5  
 Grid ref: TL447576  
 Date of survey: 1/10/98

### Habitat information

<b>Code</b>	<b>Habitat type</b>
A111	Woodland: broadleaved, semi-natural
A22	Scrub: scattered
A31	Parkland/scattered trees: broadleaved
B6	Grassland: poor semi-improved
C31	Tall herb and fern: other, tall ruderal
F21	Marginal/inundation: marginal
G2	Open water: running water
J261	Boundaries, permanently flooded ditch

### Site description

This site combines Sheep's Green and Robinson Crusoe Island (which was formerly part of SINC E4.6). Sheep's Green is an area of poor semi-improved pasture land grazed by cattle, with scattered trees, bordered by two channels of the River Cam. It is divided by a busy road running approximately east-west, Fen Causeway. Robinson Crusoe Island comprises trees and scrub, rough grassland and is separated from Sheep's Green by a drain.

The sward is a mosaic of reasonably close-grazed semi-improved grassland with abundant *Lolium perenne* and *Cynosurus cristatus* and frequent patches of ungrazed tall herb species such as *Cirsium arvense*, *Cirsium vulgare*, *Rumex* sp. and *Urtica dioica*. The grassland is rather poor in forb species and no grassland indicator species were recorded during the Phase 2 survey. Frequent low forbs include *Plantago major*, *Ranunculus repens* and *Trifolium repens*. At the time of survey the sward south of Fen Causeway was 5-10 cm in height and the sward north of the fen Causeway was less than 5cm in height.

There are numerous scattered mature trees throughout the site with the greatest densities to be found north of Fen Causeway. *Salix alba* is the predominant species in both parts of the site, being present both as standard trees and as pollards. All the pollards are at least middle-aged with many mature individuals present; maximum dbh is generally about 0.8m although an individual in the northern part of the site is nearer 1.5m dbh. Many of the pollards are to be found standing close to the various drains/watercourses that wind through the site, these presumably being former river channels. Many of the pollards are in active management. Standing and fallen dead trees occur occasionally, especially in the northern part of the site. Other trees present south of Fen Causeway include *Populus nigra* 'italica' and *Betula pendula* with some recently planted *Salix* sp.. Similar species are found to north of Fen Causeway with, in addition, species such as *Acer pseudoplatanus* and *Fraxinus excelsior*. Scattered *Crataegus monogyna*, *Rubus fruticosus* and *Rosa canina* scrub occurs occasionally.

The western boundary of the site is formed by a mill stream that leads to Newnham Mill. South of Fen Causeway the eastern bank of this channel is variously poached and grazed by the cattle. Scrub and trees occur occasionally, species include *Salix fragilis* and *Crataegus monogyna*. The vegetation is a mix of grassland with

frequent tall herb patches, mainly *Urtica dioica*, and locally abundant *Rubus fruticosus*. North of the causeway trees, mainly *Fraxinus excelsior*, become more frequent and the bank is less poached but otherwise the grassland and tall herb vegetation is similar.

The description of the in-channel vegetation and frequent emergent vegetation properly belongs with the River Cam CWS.

A stream crosses the site starting in the southeast close to the river, meandering northwestwards under Fen Causeway and then northwest up to Mill Pit. South of Fen Causeway it is about 3.5m wide and the water varies from 20cm to 60cm deep. The banks are slightly poached and grazed and support generally similar vegetation to that found in the main grassland on the site. Emergent vegetation is well developed and includes frequent *Veronica beccabunga*, *Rorippa nasturtium-aquaticum* and *Glyceria cf. fluitans*. Submerged/floating vegetation includes frequent *Callitriche sp.*, *Lemna minor* and filamentous algae. North of the causeway the stream is in places up to 7m wide and 80cm though generally its dimensions are closer to those of the section to south. Bank vegetation is again a mix of very improved grassland with frequent tall herb vegetation. Emergent vegetation is frequent and includes *Rorippa nasturtium-aquaticum*, *Veronica beccabunga*, *Phalaris arundinacea*, *Glyceria cf. fluitans* and *Myosotis scorpioides*. Submerged/floating vegetation includes frequent *Lemna minor* and *Callitriche sp.*.

The drain that runs approximately north-south across the site to join the stream immediately south of Fen Causeway is about 1m wide at its southern end and some 5m wide at its confluence with the stream. The banks are slightly poached and grazed. The channel is filled with emergent vegetation; frequent species include *Rorippa nasturtium-aquaticum*, *Veronica beccabunga*, *Apium nodiflorum* and *Glyceria cf. fluitans*. Submerged/floating vegetation is very similar to that in the stream.

On the eastern side of the site, separated from Sheep's Green by a narrow channel of the river, lies Robinson Crusoe Island. South of Crusoe bridge the island is dominated by broadleaved woodland with frequent *Salix alba* and occasional *Fraxinus excelsior*. The rather sparse shrub layer consists largely of *Crataegus monogyna* with occasional *Ligustrum vulgare* and *Symphoricarpos albus*. The ground flora is predominantly grassy, a consequence of the high light levels in the wood. Frequent species include *Poa trivialis*, *Brachypodium sylvaticum* and *Lolium perenne*. Other frequent or locally frequent species include *Urtica dioica*, *Hedera helix*, *Aegopodium podagraria*, *Alliaria petiolata*. Immediately to south of the wood is a small area of rank mesotrophic grassland with abundant *Brachypodium sylvaticum* and frequent *Dactylis glomerata*, *Agrostis stolonifera* and *Urtica dioica*. North of Crusoe Bridge the island is more open and is dominated by species-poor semi-improved grassland.

The river channel separating the island from Sheep's Green is 3m wide. The water is about 50cm deep and its surface is dominated by *Lemna minor* and *Lemna minuta*. Marginal/emergent vegetation is sparse; species include occasional *Epilobium hirsutum*, *Carex riparia*, *Glyceria maxima*, *Myosotis scorpioides* and *Rorippa nasturtium-aquaticum*. Frequent scrub stands beside the channel.

There is known invertebrate interest for the site, mainly relating to the trees, although records have not been collated for this report.

## Site assessment

This site qualifies as a County Wildlife Site for pollard willows.

## Site Record Sheet

Site Name                   Coe Fen  
 Site code:                 E4.10  
 Grid ref:                 TL449575  
 Date of survey:         4/8/98 and 5/8/98

## Habitat information

<b>Code</b>	<b>Habitat type</b>
A111	Woodland: broadleaved, semi-natural
A22	Scrub: scattered
A31	Parkland/scattered trees: broadleaved
B6	Grassland: poor semi-improved
C31	Tall herb and fern: other, tall ruderal
F21	Marginal/inundation: marginal
G2	Open water; running water
J261	Boundaries, permanently flooded ditch

## Site description

This site combines Coe Fen south of Fen Causeway (E4.10), Coe Fen north of Fen Causeway (E4.11) and the eastern section of the SINC Robinson Crusoe Island (E4.6). It is an area of common land consisting largely of rough grazing with scattered trees adjacent to the River Cam.

### *South of Fen Causeway*

South of Fen Causeway the site is divided into two unequal compartments by a minor channel of the river running approximately parallel to the river itself. Between this channel and the main channel is semi-improved mesotrophic grassland dominated by *Lolium perenne*, *Cynosurus cristatus* and *Agrostis stolonifera* with frequent *Trifolium repens*, *Urtica dioica* and *Anthriscus sylvestris*; at the time of survey this sward was generally grazed down below 5cm.

To east of the minor river channel the sward is considerably coarser and bulkier and, at the time of survey, generally tall and only lightly grazed. In addition to abundant *Arrhenatherum elatius* the sward includes frequent *Phleum pratense*, *Dactylis glomerata*, *Cirsium vulgare*, *Cirsium arvense*, *Urtica dioica* and *Rumex obtusifolius*. The only grassland indicator species recorded in the grassland south of Fen Causeway was *Hordeum secalinum*. The grazing stock on this site are horses and cattle.

Frequent scattered trees occur along the course of the minor river channel and along the river bank proper. A high proportion of these are *Salix alba* pollards, an estimated 60-70 boles being present. Most of these are in active management and new willows are also being planted. At the northern end of the minor channel stand several tall mature *Populus* sp over dense mature scrub with a sparsely vegetated grazed ground layer.

The minor river channel is approximately 2m wide with water about 50cm deep which was not discernibly flowing at the time of survey. Marginal/emergent vegetation includes frequent *Carex riparia* and *Lycopus europaeus*; other species include *Glyceria* sp, *Rumex hydrolapathum*, *Mentha aquatica*, *Lythrum salicaria* and *Alisma plantago-aquatica*. The water surface is dominated by *Lemna minor* and *Lemna minuta*.

The straight drain that runs very roughly north-south through the eastern part of the site connects to Vicar's Brook at its southern end. The channel is 2.5-3m wide and the water about 0.7m deep; the banks are up to 2m high and steeply sloping. The drain is well vegetated with frequent emergent vegetation of *Glyceria maxima*,

*Phalaris arundinacea*, *Carex riparia* and *Rorippa nasturtium aquaticum*. Floating/submerged vegetation consists largely of *Lemna* sp and *Callitriche* sp.

#### *North of Fen Causeway*

This part of the site is also predominantly coarse semi-improved mesotrophic grassland used for rough grazing. At the time of survey the sward was being very lightly grazed and was consequently tall and rank in many areas, other areas were quite closely grazed. Frequent or abundant grass species include *Lolium perenne*, *Arrhenatherum elatius*, *Dactylis glomerata*, *Holcus lanatus* and *Hordeum murinum*. Herbs are reasonably frequent but consist very largely of tall herbs and very common grassland species; typical species include *Plantago lanceolata*, *Trifolium repens*, *Achillea millefolium*, *Urtica dioica*, *Rumex obtusifolius* and *Cirsium arvense*. The grassland indicator species *Carex hirta* is locally frequent in the area to south-east of Crusoe Bridge but otherwise the only indicator recorded was *Hordeum secalinum*.

Occasional broadleaved trees occur scattered along the boundaries of the site and along the straight drain that more or less bisects the site; species include *Acer pseudoplatanus*, *Salix alba* and *Aesculus hippocastanum*.

The middle section of the eastern boundary of the site is a steep sided drain with a channel about 3m wide. The entire length of the drain is shaded by trees and shrubs in the college garden adjacent to east (Peterhouse deer park, E4.8). The sparse emergent/marginal vegetation includes *Ranunculus lingua*, which is almost certainly planted. The water surface is dominated by *Lemna minor*.

The western boundary of the site, north of Crusoe Bridge, is a drain about 4m wide with water about 70cm deep. The southern half of the drain is generally heavily shaded by trees and sparsely vegetated. The northern half is more open and the margins are slightly poached. This section has frequent marginal/emergent vegetation of *Glyceria maxima*, *Lycopus europaeus*, *Myosotis scorpioides*, *Veronica beccabunga* etc. Submerged and floating vegetation consists of abundant *Lemna minor* and filamentous algae with occasional *Ceratophyllum demersum*.

South-east of Crusoe Bridge is a small copse of broadleaved woodland separated from the main body of the fen by a minor river channel, a continuation of the channel described in the part of the site south of Fen Causeway (this copse was formerly included in the site Robinson Crusoe Island, E4.6). The copse is composed largely of *Acer pseudoplatanus* over a dense shrub layer with frequent *Crataegus monogyna* and *Rubus fruticosus*. The ground flora contains frequent *Hedera helix* and *Brachypodium sylvaticum* with tall herb species such as *Filipendula ulmaria*, *Cirsium vulgare*, *Symphytum officinale* and *Urtica dioica*.

The short section of minor river channel is about 4m wide and has low banks only 20cm above water level. Marginal/emergent vegetation is rather sparse and includes occasional *Carex riparia*, *Lycopus europaeus*, *Filipendula ulmaria* and *Apium nodiflorum*. The water surface is dominated by *Lemna minor*.

The straight drain that runs lengthways through the site is 3m wide and the slow-flowing water is 80cm deep. The in-channel vegetation is annually cleared out and the arisings deposited on the bank tops. Emergent/marginal vegetation includes frequent *Rorippa nasturtium-aquaticum* and *Glyceria maxima* together with species such as *Sparganium erectum*, *Stachys palustris*, *Juncus effusus*, *Lycopus europaeus* and *Apium nodiflorum*. Submerged/floating vegetation includes frequent *Lemna minor* and *Callitriche* sp and occasional *Potamogeton pectinatus*. Along the northern half of the drain dry bank vegetation is dominated by tall herb vegetation, in the southern half the vegetation is more grassy and open.

Records from 1997 show that the aquatic grass *Catabrosa aquatica*, which is a rare species in the county, is present at the site.

#### **Site assessment**

The site qualifies as a County Wildlife Site for pollard willows and because it supports a population of a vascular plant species which is rare in the county.

## Site Record Sheet

Site Name: Mill Pool  
Site code: (E4.12)  
Grid ref: TL446579  
Date of survey: 24/9/98

## Habitat information

<b>Code</b>	<b>Habitat type</b>
F21	Marginal/inundation: marginal
G2	Open water: running water

## Site description

This site is an old mill pool with about 50% of its banks constructed of wooden piling and the remaining banks made of concrete or bricks. A variety of woody and herbaceous species have managed to colonise the walls and gain a foothold between the piling posts, most being present at low or very low frequency. The most frequent species are *Parietaria judaica* and *Urtica dioica*. Fern species are well represented and include *Pteridium aquilinum*, *Phyllitis scolopendrium* and *Dryopteris filix-mas*.

Marginal and emergent vegetation is generally very sparse although *Rorippa nasturtium-aquaticum* and *Veronica beccabunga* are locally frequent. Other species include *Scutellaria galericulata*, *Filipendula ulmaria*, *Stachys palustris* and *Lycopus europaeus*.

Submerged vegetation is generally sparse but becomes more frequent in areas towards the middle of the pool in deeper water. Species include *Potamogeton perfoliatus*, *Potamogeton pectinatus* and *Ceratophyllum demersum*. The pool contains frequent *Lemna minor* and *Sparganium emersum* and abundant filamentous algae.

Cattle-grazed improved grassland lies adjacent beyond the southern and eastern site boundaries; in the other directions lie buildings and roads. The pool is occupied by punt hire businesses and during the summer the site is heavily used for this purpose; the neighbouring areas of grassland are well used by the public.

## Site assessment

Although not qualifying for CityWS status in its own right the site forms part of the River Cam CWS.

*The species lists are available in the full Cambridge City Wildlife Survey 1998.*

**APPENDIX 4** Summary of the significance, vulnerability and conservation guidance for Sheep's Green and Coe Fen

Significance	Vulnerability	Conservation Guidance
<b>3.2 Archaeological importance</b>		
<p>The archaeological finds from the Iron Age and Roman Periods south of the site may mean that there is undiscovered evidence of settlement on these commons. The activity associated with the three corn mills dating from at least 1086 on the edge of Sheep's Green; links between the settlement at Newnham and the town; the importance of the river crossing point might result in lost artefacts. The remnants of the original river channels on Sheep's Green can still be seen.</p>	<p>A lack of awareness about the history of the site could mean that the significance of artefacts discovered during routine work might be disregarded. A failure to understand that the river has been diverted to form the mill races might lead to remnants of the original river course being in-filled.</p>	<p>Opportunities to add to the archaeological knowledge of these commons should be taken. The course of the river original riverbed should be allowed to remain.</p>
<b>3.3 Architectural history or design significance</b>		
<p>The channelling of the river into two mill races took place at least 900 years ago. The 1501-2 wall with its watergate between Peterhouse Grove and Coe Fen is an important structure historically and in townscape terms because of the enclosure it provides to this part of Coe Fen.</p>	<p>The watergate is half buried because the land level on Coe Fen has been raised.</p>	<p>The wall should be protected from harmful activities on the Fen side. The existing brambles probably provide important protection.</p>
<b>3.4 History of the open space</b>		
<p>Sheep's Green and Coe Fen have a long history of use as grazing land. In more recent years it has had a recreational value associated with swimming in the river, although this may well have occurred in earlier times also.</p>	<p>The land has been vulnerable to overgrazing which coupled with poor drainage has led to dire conditions at times in the past. Awareness of water quality and Weil's disease (transmitted in rat urine) and submerged objects dumped indiscriminately make swimming in the river undesirable and technically illegal today.</p>	<p>Managing the grazing for the benefit of the wildlife habitat value rather than for maximum yield for grazing will help to avoid some of the degradation that has occurred in the past.</p>
<b>3.5 Community, commemorative or social value</b>		
<p>Sheep's Green and Coe Fen are registered common land. They are highly valued for their amenity and informal recreational value. They carry a network of foot and cycle paths providing routes north-south and east-west, linking into the wider network around.</p>	<p>Inadequately surfaced paths and the way animals at the pedestrian and cycle access points are contained could limit access to certain users who need to get wheelchairs or prams through the barriers.</p>	<p>Continue to use the cattle grids in conjunction with the traditional barriers to give easy access to a wide range of users. Recognise the part Coe Fen and Sheep's Green could or already do play in local and longer distance walks. take all opportunities to secure access over the missing links in this footpath network.</p>

Significance	Vulnerability	Conservation Guidance
<p><b>3.6 Ecological value</b></p> <p>Sheep's Green and Coe Fen and the Mill Pool as part of the River Cam, have County Wildlife status. There are opportunities for the valuable standing and lying dead wood habitats on these open spaces.</p>	<p>Loss of the pollard willows on Sheep's Green and Coe Fen and the range of vascular plants on Sheep's Green would threaten this status.</p> <p>An inability to adequately manage the safety implications of veteran trees and other standing and lying dead wood could mean that a much lower level of dead wood would have to be tolerated.</p> <p>Overgrazing will conflict with the nature conservation value of the meadow.</p> <p>Over planting of spreading forms of willow and poplar in the existing spaces to compensate for anticipated tree losses would affect the balance of light and shade currently enjoyed by the meadow plants, resulting in changes to the ground flora.</p> <p>Accommodating the expectations of the public that the meadow will have a particular appearance may conflict with its nature conservation value.</p> <p>Overzealous clearing out of ditches leads to a loss of habitat value of the waterbodies and undesirable enrichment of the bank margins, leading in turn to unwanted rank vegetation.</p> <p>Unnecessary clearance of the depressions left by the original watercourse would destroy a seasonal wetland habitat reducing the habitat variety on the commons.</p>	<p>Continue to manage the fen for the benefit of wildlife rather than for maximum grazing yield. Commission further surveys and encourage contributions from local experts who know the fen well to gain a wider knowledge of the wildlife that occurs there throughout the year. Draw up a detailed management plan for the grassland, waterbodies, wetlands, trees and shrubs, using this information to further improve the habitat value in the future. Devise management techniques that are sympathetic to the nature conservation objectives and yet effective in achieving necessary maintenance. Promote the fen as an educational resource at all levels and explain to the public the value and potential of this area.</p>
<p><b>3.7 Education or public potential</b></p> <p>These commons are centrally situated with good access and suitable setting down opportunities for school parties at the Lammas Land car park. There is considerable educational potential for the study of natural history and wildlife conservation of all ages. It is a particularly valuable resource for city schools without space for their own wildlife area.</p>	<p>Lack of awareness of the potential and a shortage of teaching resources could mean that groups who could benefit might not.</p>	<p>Encourage the use of these commons for educational purposes at all levels, inviting contributions to an information resource that would form a background to interpretation material and help guide management decisions.</p>

Significance	Vulnerability	Conservation Guidance
<b>3.8 Public or recreational value</b>		
<p>Their location close to the city centre and large bodies of housing makes Sheep's Green and Coe Fen valuable informal recreational areas. The picnic area provides a place protected from the large animals yet within the same general environment. Regular litter clearance here, on Laundress Green and elsewhere on the fen are important in maintaining the amenity value. The punt hire business at the site of the old King's and Bishop's Mills provide not only enjoyment on the river but an activity to watch from the riverbank. The Learner Pool is a facility that allows older children to swim without having to use the river.</p>	<p>Poor access would limit the availability of this local resource to those who might otherwise enjoy it. A lack of investment in general maintenance and in the trees in particular would result in a gradual degradation of the environment that would limit its recreational appeal. Loss of the site for the hire of punts would have a serious effect on the character of the river in summer.</p>	<p>Ensure good access for the widest range of users in way that preserves the character of the open spaces.</p> <p>Produce an arboricultural strategy to cover new planting and management of the trees.</p> <p>Support the activities and facilities that help to bring life to the river and enjoyment to the users of Sheep's Green and Coe Fen.</p>
<b>3.9 Contribution to townscape character.</b>		
<p>Sheep's Green and Coe Fen provide a transition between the wider countryside, the managed grounds of the colleges along the Backs and the urban area. The tree cover on the fen is very important but so too is the balance between sun and shade on the meadow. The wooded fringe to these commons, on public and private land is an important contributions to the character of the surrounding areas. The scale of the open spaces allows long views of the city and many of the important buildings become visible as part of the skyline.</p>	<p>Lack of a proper arboricultural strategy might mean that the gradual loss of trees would not necessarily be replaced appropriately or even at all, leading to a degradation of the commons and their wildlife. Loss of the tree planting on private land would have a serious effect on the rural character of Sheep's Green and Coe Fen.</p> <p>Excessively tall or poor quality buildings, even at some distance from the fen, could adversely affect the quality of the skyline. The quality of the buildings that immediately surround the fen and may be visible immediately or at some time in the future needs to be considered.</p>	<p>Produce an arboricultural strategy for the commons and consider the influence of existing and potential tree planting on private land. Involve the surrounding landowners in the production of this strategy so the contribution of their trees can be properly understood and where possible the planting opportunities implemented.</p> <p>Produce planning briefs for new development adjacent to Sheep's Green or Coe Fen or that could be visible from there.</p>
<b>3.10 Natural and aesthetic beauty</b>		
<p>The natural and aesthetic beauty of Sheep's Green and Coe Fen are fundamental to the enjoyment of the spaces within and from outside the site. The combination of the trees, the cows and meadow flora and their relationship with the water and some of the buildings that overlook these commons, are central to the character of the area.</p>	<p>A loss of any of these elements would lead to a gradual deterioration in the quality of this environment. An awareness of their interrelationships is vital in its successful management. The introduction of lighting, excessive widening of the paths and unsympathetic surfacing would urbanise these spaces and be detrimental to the character of the area.</p>	<p>A management plan that reconciles the different interests is necessary to conserve the character and value of these city centre commons.</p>

## APPENDIX 5 Sheep's Green and Coe Fen Gazetteer

### 1. RAILINGS

#### Description

Cast iron railings enclosing New Bit along the Trumpington Road boundary, use the Cambridge bollard. The cattle are contained by a variety of designs of cast iron gates and pram irons. Where possible metal cattle grids have replaced these to ease the passage of cyclists, wheelchair users and prams.

Timber post and rail fencing contains the animals along Fen Causeway and around the picnic area on Sheep's Green. Timber bird's mouth fencing forms the west boundary with Lammas Land. Timber has been used as less expensive alternative to iron railings.

#### Significance

The cast iron details, particularly those involving the Cambridge bollard, provide continuity with the designs and materials used on the City's other major open spaces. The use of high quality materials implies these are open spaces of some importance particularly as they are semi-natural areas of grassland.

The location of the timber fencing is very important. It needs to effectively contain the animal stock in a way that also maintains the minimum visual separation between the north and south parts of Sheep's Green and Coe Fen following their division by Fen Causeway.

#### Guidance

The use of traditional metal parkland fencing would be highly desirable as it would be less conspicuous than timber. Grant aid should be sought to finance this more expensive option.

### 2. PATHS AND CYCLEWAYS

#### Description

There are paths surfaced in gravel, asphalt and carr stone. Some others are formed simply by the suppression of the turf plants by frequent use.

#### Significance

These routes reflect the desire lines established by the public over many years and many are definitive footpaths. The gravel and carr stone materials are sympathetic to the rural character of the open spaces.

#### Guidance

Asphalt is a practical surface for areas of heavy wear and its basic black form can be made to look less urban by the incorporation of gravel chippings into the top surface. Path edgings should be detailed so that they are invisible. Conflict between cyclists and pedestrians needs to be minimised by good design and by considerate use.

### 3. SEATS AND BINS

#### **Description**

The majority of the seats are of the Wicksteed 'Huntington' design.

#### **Significance**

The simple low-key design is easily repaired and their location where people can enjoy peace and views of the river is important.

#### **Guidance**

The rapid repair of damaged seats and the removal of any graffiti is necessary so that a derelict appearance does not develop, particularly in winter when the vegetation is faded.

### 4. RIVER EDGING DETAILS

#### **Description**

The west bank of the main river was strengthened with steel and concrete piles in 1993 from the weir at the site of the King's Mill down to the Sheep's Green Learner Pool. As a riparian owner the Garden House Hotel carried out similar work on the east bank. Timber piles protect the river edge between Fen Causeway and the north of Robinson Crusoe Island, and around Laundress Green and Nutter's Close where the cattle and periodic floods cause erosion. Parts of Snobs Stream are also piled.

#### **Significance**

The recent assessment carried out by the Wildlife Trust identified that different plants are associated with the different types of piling. The piling has a functional role preventing erosion of vulnerable land such as Laundress Green and elsewhere prevents the banks gradually slumping into the river, blocking the relatively narrow channel.

#### **Guidance**

Scenes of the flooded river pouring over its banks on to Sheep's Green in February 2001 clearly showed that piling is necessary to protect this part of the river which was raised and diverted from its natural course hundreds of years ago. The temptation to pile all the edges should be resisted however since the natural edges provide important edge habitat for plants and animals. They also make the river accessible to the cattle and their poaching of some edges increases habitat diversity. The treatment of the banks, particularly those facing the tow paths is fundamental in setting the character of the river. Fortunately in most cases these banks are less vulnerable to flood damage since they are against higher land rather than the artificially made up land of the west bank. Here the aim should be to achieve a natural junction between land and water. Where some piling is necessary the design should allow the top to be colonised by vegetation to soften its appearance. Careful design and the use of high quality materials are therefore very important.

## 5. DITCHES AND OLD WATERCOURSES

### Description

The diversion of the main river to supply the mills has not entirely eradicated the earlier channels. Although most are dry for the main part of the year some carry water in wet periods.

### Significance

These ditches and old watercourses perform an important role in helping to drain the fen in periods of wet weather and in draining water from farmland south of Sheep's Green and Coe Fen. In turn they provide a range of valuable habitats, some of which are only seasonally damp, while others consistently contain water but with a range of flow rates. These are very important for certain invertebrates and plants.

### Guidance

The range of wet conditions should be maintained in order to retain the habitat variation. The old watercourses, some of which are quite subtle depressions, should be protected from invading scrub but not cleaned out since the particular flora and associated invertebrates will be destroyed. The ditches that perform an important drainage function need to be kept unobstructed but opportunities to informalise their edges and vary their depth should be continued. Ditches which do not have this function should be cleaned out much less frequently and ideally only relatively short sections at a time so that recolonisation can take place. The use of vegetation cutters rather than excavators should be continued where possible as the effects are less drastic on established communities and to an extent avoids the enrichment of the adjacent land when the dredged material is cast up alongside the ditch.

## 6. BRIDGES

### Description

The bridges comprise the inconspicuous simple plank bridges over the smaller ditches; the white painted timber bridges mainly over the streams on Sheep's Green; the two iron bridges over the main river linking Coe Fen and Sheep's Green; and the concrete bridges, refurbished in 2000/2001 which carry Fen Causeway over the river, other water channels and the cattle underpass.

### Significance

The bridges give access to all parts of these open spaces. They are sufficiently conspicuous to make the footpath system legible to people who are not familiar with the layout. They therefore give a sense of confidence to novice explorers and a sense of security since there is apparently a choice of routes to follow if necessary. There is a diverse network of paths that enables large numbers of people to take the most convenient route across the fen from a number of starting points. This means that people can experience sufficient solitude to enjoy the sense of space without feeling uncomfortably isolated or vulnerable.

### Guidance

The bridges must continue to be easily visible. As with the other structures and artefacts on the fen it is important that they are maintained in good repair to show that these are spaces which are cared for even though the vegetation is informal.

## **7. PETERHOUSE COLLEGE WALL**

### **Description**

The early 16th century wall forms the eastern boundary of Coe Fen. Its maintenance is not the City Council's responsibility.

### **Significance**

The listed wall is a part of the historic fabric of the grounds of Peterhouse College and an important feature in the landscape of Coe Fen. The south west facing aspect provides a warm sheltered environment for the brambles and their associated invertebrates, enriching the biodiversity of Coe Fen.

### **Guidance**

There has been some graffiti sprayed on the wall in the past and the brambles growing along its base help to keep people at a distance. It will be necessary to cut them down every few years to prevent the brambles from eventually obscuring the Watergate and the numerous repairs to the stonework.